BEFORE THE
COPYRIGHT ROYALTY TRIBUNAL
WASHINGTON, D.C.

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In the Matter of :

1990 CABLE COPYRIGHT ROYALTY :
DOCKET NO. CRT 92-1-90CD
DISTRIBUTION PROCEEDING :
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(This volume contains pages 422 through 641)

Washington, D.C.

Friday, September 10, 1993

The above-entitled matter convened, pursuant to adjournment, in the Offices of the Copyright Royalty Tribunal, in Room 921, 1825 Connecticut Avenue, N.W., Washington, D.C., at 10:00 a.m.

BEFORE:

CINDY DAUB	Chairperson
BRUCE D. GOODMAN	Commissioner
EDWARD J. DAMICH	Commissioner
LINDA R. BOCCHI	General Counsel

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C O N T E N T S

E X H I B I T S

P R O C E E D I N G S

(10:10 a.m.)

CHAIRPERSON DAUB: Good morning. We are on the record.

Whereupon,

STANLEY M. BESEN

was called as a witness and, having first been duly sworn, was examined and testified as follows:

Mr. Garrett?

MR. GARRETT: Madam Chairman, yesterday, the Tribunal asked if we would bring Mr. Larson in this morning to testify concerning certain matters that were raised during my cross-examination of Mr. Lindstrom.

Yesterday evening, Mr. Lindstrom, Mr. Larson, Mr. Lane and I met and we were able to work out a stipulation of sorts here, which I would like to present for the record at this time, and then see how the Tribunal would like us to proceed.

What we have stipulated to -- and, Dennis, correct me if I am wrong in any regard here -- is that the data in Joint Sports Claimants Exhibit 5-X are derived from the same databanks as are the data in MEK-8, Program Suppliers MEK-8, and that is reflected in part by the fact that the bottom line numbers in

JSC Exhibit 5-X and MED-8 are exactly the same.

The data provided Joint Sports Claimants by Nielsen do not correspond to the data reflected in Joint Sports Claimants Exhibit 5-X -- in other words, the data that Nielsen provided me do not correspond with the data that Mr. Larson had provided me -- and neither Mr. Larson nor Mr. Lindstrom were able to explain the differences during our meeting last night.

The both are endeavoring to try to come up with an explanation as to why the two data don't correspond, and will report back to Mr. Lane and myself, and we will then report back to the Tribunal, as to why the data I'm getting from Program Suppliers' two consultants don't jibe.

CHAIRPERSON DAUB: Mr. Garrett, the material that you're referring to from Nielsen, does the Tribunal have a copy?

MR. GARRETT: Madam Chairman, the data that I'm referring to from Nielsen are the same data that are reflected in Joint Sports Claimants Exhibits 2-X, 3-X and 4-X. Those are the data that we had asked Nielsen to provide on a program-by-program basis, the household data, all the material that we went over during cross-examination of Mr. Lindstrom yesterday.

CHAIRPERSON DAUB: It's Sports Exhibit 3-

X?

MR. LANE: The Nielsen was 3-X and the Larson data was 5-X.

MR. GARRETT: Madam Chairman, it was the portion of the cross-examination where we had data from Nielsen indicating that there was a movie --

MR. LANE: She has it.

MR. GARRETT: I'm sorry?

CHAIRPERSON DAUB: I do have it. 3-X is the Nielsen data you're referring to?

MR. GARRETT: Yes, ma'am.

CHAIRPERSON DAUB: And the Larson data is Sports 5-X.

MR. GARRETT: Yes, ma'am.

CHAIRPERSON DAUB: What you're saying is Sports 5-X and Sports 3-X do not correlate.

MR. GARRETT: The data that Nielsen provided in not only 3-X, but all of the other information that they provided me, did not correspond with the information that I got from Cable Data Corporation, and it's that discrepancy that the two MPAA consultants will attempt to work out.

CHAIRPERSON DAUB: Thank you, Mr. Garrett.

MR. LANE: Specifically, they are looking for the discrepancies that were in 3-X and 5-X.

That's what we focused on because that's all that was presented to the Tribunal.

CHAIRPERSON DAUB: Thank you.

MR. GARRETT: I did agree to provide Mr. Lindstrom and Mr. Larson with a list of all of the various discrepancies that we found not only in those exhibits, but any other data that they provided, so that they could come up with an explanation of why that's the case, and I will do so.

COMMISSIONER DAMICH: Do we have a time frame on when the report will come back?

MR. LANE: On the initial request, they were both hopeful that they would get some sort of an answer later on today. And then once Mr. Garrett and I have that, we could determine how much more how to go and give the information back to Mr. Larson and Mr. Lindstrom, and then get an idea of how much longer that would take.

CHAIRPERSON DAUB: Thank you. Mr. Lane, would you proceed with your witness?

DIRECT EXAMINATION

BY MR. LANE:

Q Would you please state your name for the record?

A Stanley Besen.

Q Did you previously prepare a document entitled Testimony of Stanley M. Besen Before the Copyright Royalty Tribunal, dated August 16, 1993, that has been previously exchanged in this proceeding?

A I did.

Q Do you have any corrections to that testimony?

A There's one minor typo on page 14, the first full paragraph, the fifth line down, "period in which the change occurred," should read "t_1". That's the only change that I know of at this point.

Q Did you also prepare or have prepared under your direction or supervision, the two attachments to that testimony?

A I did.

Q And do you have any corrections for those attachments?

A No.

Q Would you briefly describe your current employment for us?

A I'm a Vice President at Charles River Associates, which is an economic and business consulting firm located in Boston and Washington. I work primarily in the area of telecommunications policy.

Q How long have you been with Charles River?

A For one year.

Q And prior to that, what position did you hold?

A Well, for the immediately preceding approximately dozen years, I was a senior economist at the Rand Corporation in Washington, D.C.

Q Have you held any teaching posts?

A Yes. I have been an Acting Assistant Professor at the University of California at Santa Barbara. I was a member of the faculty at Rice University for approximately 15 years, where I was an Assistant Professor, Associate Professor, Professor of Economics and, ultimately the Cline Professor of Economics and Finance. That was during the period 1965 to 1980. During my tenure at Rand, I took two leaves of absence to teach. During one year, I was the Visiting Henley Professor of Law and Business at Columbia University, where I taught in the law school and business school at Columbia. And during one academic year, I was Visiting Professor of Law and Economics at the Georgetown University Law Center.

Q Have you held any positions in the government?

A Yes. In 1971 and 1972, I was a Brookings

Economic Policy Fellow at the Office of Telecommunications Policy in the Executive Office of the President, and between 1978 and 1980 I was co-Director of the Network Inquiry Special Staff at the Federal Communications Commission.

Q Have you authored any publications?

A I have.

Q What are the primary areas in which you have authored publications?

A Primarily in the area of telecommunications, economics and regulation of the broadcasting and cable industries. I've also done papers on the economics of intellectual property and, more recently, work on economics of standardization, particularly in the computer and telecommunications industries.

Q And are your publications listed as part of Attachment A to your testimony?

A That's correct. There's a brief recitation of them in the statement itself, and then a longer resume in the appendix.

MR. LANE: At this point, Madam Chairman, I would offer Dr. Besen for voir dire?

CHAIRPERSON DAUB: Any voir dire?

MR. GARRETT: No questions, Madam Chairman.

CHAIRPERSON DAUB: Mr. Stewart?

MR. STEWART: No questions.

CHAIRPERSON DAUB: Mr. Hester?

MR. HESTER: No questions.

CHAIRPERSON DAUB: Mr. Gottfried?

MR. GOTTFRIED: No questions.

CHAIRPERSON DAUB: Thank you. Please proceed.

MR. LANE: Thank you.

BY MR. LANE:

Q Dr. Besen, what is the purpose of your testimony?

A The purpose of the testimony is to present evidence of a study based on the actual behavior of cable television operators in the choicest of distant signals to carry that will permit the Tribunal to determine the appropriate shares to be awarded to the various claimants in this proceeding.

Q And how did you go about determining those values?

A We conducted a study of the behavior of cable operators during a period of time, linking their choices of which distant signals to carry, or to add, or delete, the programming on those signals, and the amounts they paid in additional royalties when they

chose to add an add an additional signal.

Q In your view, is this a new study of operator behavior, in these proceedings?

A Yes. I've had occasion to recently reread the Tribunal's order in this proceeding, for the 1989 proceeding, and the Tribunal then asked at that point what new evidence there was at that point.

To my knowledge, this is the first study of actual cable operator behavior presented to the Tribunal over the period of time that I've been familiar with this activity. So, it's entirely new in that respect.

Q Would you briefly describe the conclusions of your study?

A The conclusion of the study, I think, can be fairly simply stated. Based on an analysis of the actual behavior of cable operators, we conclude that the appropriate share to award to the owners of Movies and Series programs is approximately 90 percent of the royalty pool. The amount that should be awarded to the Sports Program Claimants is approximately 9 percent of the royalty pool. The amount that should be awarded to Devotional Claimants is approximately 1 percent of the royalty pool. And we conclude that the appropriate share to award for Local programming is,

in fact, zero.

Q Did you have any premises on which you based your study?

A I did.

Q Could you briefly list those premises for us?

A Briefly list them, and I've got them up here so that I can remember them, and maybe it's a little easier to follow along as we proceed.

The first premise of the analysis is that if one is going to study or try to understand the valuations that cable operators place on distant signals -- on the various programs on the distant signals they carry -- that one ought to base the analysis on their actual behavior, not on statements that they might make about those values. That is the first premise.

The next set of premises basically talks about, in fact, how -- or underlies how the analysis was actually carried out. We make the standard economic assumption that operators maximize their profits.

The implication of that -- and this is important for the analysis that we conducted and that I'll report on here -- is that a cable operator will

add distant signals if there is value to the cable operator -- and I'll define value in more detail in a moment -- but if their value exceeds the additional royalties the operator has to pay. That's an implication of the assumption that operators attempt to maximize profits.

The third premise -- I should say, the fourth -- the fourth premise here basically says that what gives distant signals their value is the programs that they contain. Distant signals can be thought of, just as the Tribunal characterized them correctly in last year's Order, as a "bundle" that consists of a variety of components. The components are the programs. The programs, in fact, give the distant signals their value, and they are what make the operator willing to pay for them.

And the final premise is that, in fact, it is possible -- and this is a question the Tribunal specifically asked last year -- how do we go about disentangling the separate values of each of the components from the overall value of the distant signal, since the components are not exchanged separately?

The premise is that it's possible -- and it's more than a premise, we did this -- that, in

fact, one can determine from the actual royalty payments, the values of the respective components of the "bundle" that is a distant broadcast signal.

Q You may have addressed this separately, but I would like to go through each premise, and my question is going to be: Could you explain it's importance for your study and for the distribution proceeding? Do you want to proceed with the first premise?

A The first premise? Of course. I think it is a virtually standard belief among economists that if you want to understand the values that people place on things, that the best evidence for that is what they actually do -- that what people say frequently provides a misleading picture of, in fact, what they actually would do in particular circumstances, an so that, in fact, if one had evidence on what people do, one ought to value that much more highly than evidence about what people say they would do.

There are a variety of reasons for that. The most obvious, I suppose, is that when you actually do something, when you purchase something as in this particular case, you're actually spending real money. There is something behind your decision. It's more than an answer to a survey question but, in fact, is

something on which you, in fact, have to expend resources. You back up your claim, as it were, with your actual behavior.

Second, and related, frequently, when you answer a survey which asks what you might do or how you might value something, the amount of effort that one expends in determining what one's true preference is, what one's true values are, is not going to be nearly as great as in a situation in which you actually are going to expend resources.

A cable operator presumably thinks a lot more about whether to add a distant signal and the programs that it contains, when it's actually going to incur additional royalty payments when it makes that decision. Then, in fact, the kind of answer it might give in response to a brief survey in which presumably the amount of time spent in formulating the response and thinking about the values is more limited.

And, finally, it's often difficult when one formulates statements -- where one tries to obtain information from people by asking them what they might do -- it's often difficult to frame the question in a way that, in fact, is understandable to the respondent.

I know, in this particular proceeding,

there has been -- and I assume will continue to be -- a controversy about precisely what the questions are, what questions that the respondents in various operator surveys -- what questions they really thought they were answering in those. When one observes actual behavior, that ambiguity disappears because, in fact, you know exactly what they did, and so the question of what behavior, in fact, you're analyzing, what true values you're getting, is much more likely to be obtained in a study in which you are looking at behavior, not at statements.

So, a fundamental premise of this analysis is that the best evidence is behavior, not statements.

Q Could you address the second premise for us?

A The second one I think I could be a good deal briefer about. Operators maximize profits. As I said, conventional among economists -- I think it's shared by every economist who has provided testimony in this proceeding this year and last, it's common ground among Professor Wildman and Professor Salinger, and Dr. Crandall and myself. I list it here simply because it's a backdrop for the assumptions that follow.

Q Could you give us some idea of what the

importance of the third premise is?

A The third premise basically says -- is a direct implication of the assumption that operators maximize profits. An operator may wish to -- an operator, in considering adding a distant signal, realizes that to add that signal, in general, would pay additional royalty payments. That is, in some sense, the cost or the price of adding that signal.

To be worthwhile, to be profitable, to increase the profits of the firm, the value of that signal to the operator must exceed the additional royalty payments that the operator incurs.

I should say here -- this is developed at some length in the paper -- that this value comes from a variety of places. When you add a distant signal, you may obtain additional Basic subscribers. You may be able to raise the price that subscribers generally pay for a fixed number of subscribers, both of which will increase Basic subscriber revenues. But it's more complicated than that because when you add a distant signal, some people who you induced to become Basic subscribers may also be subscribers to Enhanced Basic service, and that's got to be reckoned in the value of the signal.

Some of them may take Premium services, Pay

services, Pay-for-View. Some of them, when you have additional subscribers, they may permit you to increase the advertising sales not on additional distant signals, but on other signals, or on other services, or other programs carried by the operator.

All of these are sources of additional value when an additional signal is added, and what a cable operator does, according to that third premise, is add distant signals when the value from each of those sources, the additional revenues that are generated, exceeds the additional royalty payments that the operator occurs when it adds that signal.

By the way, to be clear, the same thing is, of course, true in reverse. The same calculus exists if an operator is considering deleting a signal. An operator will delete a signal if it saves more in royalty payments than in associated losses in revenues.

Q Could you describe the importance of the fourth premise?

A The fourth premise is that what gives distant signal value is the programs they contain. One can think -- and I think this is a useful metaphor -- a distant signal is a bundle. It's a bundle of programs of different types. Sometimes, in sort of

more generic terms, economists refer to these components as "attributes" of the particular product.

The attributes, or the components, of the product are, in fact, the programs that it contains. I should say, by analogy, one can think that the attributes of an automobile consist of things like its horsepower, its wheelbase, its styling, its safety features, and the rest.

So, many of the products that individuals consume, in fact, are themselves combinations of components or attributes, and the particular product or good that we call a distant signal has as its attributes the programs that it contains.

Q And would you describe the importance of your final premise?

A Well, the final point is, I think, really quite fundamental, and I'd like to take a minute or two to sort of describe it at some length.

Even though these products, or these components, only are obtained in a bundle, it is nonetheless possible to determine the value of the components of the bundle. Even though we pay a single price for something -- as in this case, a single royalty payment to carry the additional signal -- in fact, it is possible to determine the value of the

components.

Before, I alluded to the fact that an automobile is a collection of components. In fact, one of the earliest attempts to apply the technique that I'm describing here -- and this was some years ago -- was an attempt to determine the separate value of the components of an automobile by observing how the prices of those components were related -- excuse me -- how the prices of a bundle were related to the collection of components they contained. And by doing so, it was possible to determine the value of the wheelbase, or the horsepower, or whatever other feature we're talking about.

Here, the basic idea is that -- and it's put very simply -- distant signals that contain very valuable programs will fetch very high prices. Distant signals that have collections of programs that are not very highly valued will fetch relatively low prices. I'm willing to pay a lot extra in royalty payments to carry a distant signal that, in fact, contains components that themselves are highly valued. And, essentially, by comparing high-price bundles and low-price bundles, we are able, in fact, to determine the respective values of each of the components, and I'll describe that in more detail as we go on.

Q What data did you collect for your study?

A We began with a dataset that was obtained from CDC which listed all Form 3 cable systems, I believe now, if I'm correct, for the period 1987 first reporting period through 1990 second reporting period. You'll see 1988 up there, I'll come back to that in just a second.

We had all of the Form 3 systems. There are something like 1200 of them, and there are -- we have reports on their carriage of distant signals for all of those -- for each of the respective six-month reporting periods.

Because we were concerned about the fact that the year 1987 followed so closely on the heels of cable rate deregulation, we eliminated the year 1987 from our analysis, and we never considered data for the year 1987.

So, the analysis consists of the time period -- or covered the time period of the first period of 1988 to the second period of 1990, so that's '88, '89, '90, six different reporting periods.

We focused on those cable systems that either -- I'm sorry, let me go back one step. We wanted to collect data on the changes on cable systems that changed distant signal carriage between reporting

periods. So, the focus was on, of that collection of 1200 distant signals, all those incidents in which a cable system, or deleted, or exchanged one distant signal for another, between the reporting periods.

There are basically two reasons for that. One, we wanted to isolate the effect of the distant signal change from a variety of other possibly confounding factors and, by focusing on changes between periods, many of the factors that might otherwise confound an analysis could effectively be ignored. We needn't take them into account if, in fact, they are not changing between the reporting periods. And for many slowly changing variables, one achieves a dramatic improvement in the ability to isolate the effective interest by looking at changes.

So, we looked at cable systems that changed their distant signal complement between reporting periods. And when we started out, we were concerned that the effect that we were looking for here -- in a sense, the relative values of the different programs on the distant signals -- that that effect might be fairly subtle to isolate.

Therefore, we wanted to have situations in which the changes that we observed in the distant signal complement, particularly in the programming on

the distant signals that were carried, we wanted those effects to be large.

And the way to identify large changes in the programming complement is to focus on situations in which the system adds a distant signal, or deletes a distant signal, or possibly where it exchanges one distant signal for another.

So, in order to identify instances in which the effect that we're seeking to isolate is likely to be relatively easy to detect, or give us a better chance of detecting it, we wanted to find situations in which the changes that we're looking for are large.

So, we looked at every instance between 1988 and 1990-2 -- 1988-1 and 1990-2 -- in which a cable system, one of these Form 3 systems, either added or deleted or swapped one distant signal for another, and that produced something like -- I'm not certain now -- I believe, something like 1200 incidents, 1200 of those changes occurred -- by the way, sometimes it involved a change of two distant signals, and we treated that as one incident -- there were some 1200 of those involving some 800 different cable systems. So, that was the first screen here, those were the observations.

As I indicated, the purpose of this was to

try to match the royalty payment changes associated with those distant signal changes, to relate those to the changes in programming. So, obviously, we needed programming data.

Unfortunately, the program sample, the data on the programming of all of the distant signals added or deleted, does not cover all of the stations that systems were adding or deleting. Nonetheless, we used every observation where we could match a change in distant signal carriage to available program data so that, in fact, we could relate the change in carriage and the associated change in royalty payments to a change in programming.

That reduced the sample -- and we used the Nielsen study provided to us by the Motion Picture Association for these data -- that resulted in 342 observations. Each observation is a situation in which a cable system either added or deleted or swapped either one or more distant signals. And that involved 278 unique cable systems.

And, finally, we got the royalty payments data from the same place we got the system signal change data, from the CDC. And, so, we had information period-by-period on the actual royalty payments made by each cable system in each of those

periods, and those were, in fact, the fundamental data in our analysis.

Q After you collected the data, what did you do?

A The short answer, I guess, is that we analyzed it. The statistical approach that we used is one that I've already alluded to, but let me sort of say a few words about it.

The basic, again, is to -- well, again, go back to the premise -- the premise is that distant signals for which people are willing to pay large prices, in fact, are likely to contain valuable programs and vice-versa for distant signals that contain programs of relatively low value. So, the idea is to match -- just as in my example of the automobile with its various components -- the idea was to relate, in this particular case, the change in the royalty payments, which is the variable I talked about before, and the change in the programming that the cable system had available on distant signals as a result of adding a particular distant signal.

It may be sort of clearer, I think, by talking specifically about an example, that's why we provided a sort of hypothetical observation. This is an example -- it's not a real observation, but it's a

hypothetical one, in order to illustrate what the underlying data look like.

So, for this particular observation, which is one of the incidents I described, one of the 342 incidents, the cable system had been paying royalties of 100 in the previous period. It's additional royalty payments were 40, so it incurred an increase in royalty payments of 40 percent. It's a 40 percent increase in its royalty payments between one period and the next.

In addition, of course, since we have the programming data, we can tell when that cable system added that signal and incurred a 40 percent increase in royalty payment, what happened in percentage terms to the programming in each of the categories that the Tribunal is going to be making allocations to. In this particular case, Movies and Series had been 400 hours and is now been increased by 40 hours, so there's been a 10 percent increase in the amount of Movies and Series carried. Sports, which had 45 hours, now has 9 additional hours, so there's been a 20 percent increase in Sports hours. Devotional hours had been 20 hours and now there's an additional 3, so there's a 15 percent increase in Devotional program hours. And Local programming had 16 hours previously,

got 2 additional hours on the distant signal, that's a 12.5 percent increase in royalty payments.

So, think of it as a collection of observations in which there's a change in royalty payments for each of them, and a percentage change in each of the program hours in the various program categories for each of them, and the objective is to use this analysis -- and, again, I repeat the point -- the assumption is that when cable systems add programs that cost them a lot, big increase in royalty payment, it must be because the underlying programs have substantially high value, and vice-versa for distant signals that are added. You might add a distant signal that has programs of relatively low value if, in fact, the associated percentage increase in royalty payments is small. And, so, that is, in fact, the set of observations that we analyzed.

One final point to make here with respect to the underlying analysis, thus far I've been describing the characteristics or the components of the distant signals as "hours". So, a distant signal consists of so many hours of Movies and Series, so many hours of Sports, so many hours of Devotional, so many hours of Local. In fact -- and I'll go into this in more detail later on, but I should say some words

here about it now -- it turns out that if one weights those hours by the amount of viewing of the programs on those signals -- and the viewing hours come from the viewing of those signals in all cable households -- if one takes that viewing information and one weights the hours by viewing that, in fact, the statistical precision of the analysis increases -- that is, in simple terms, the fit is better if the hour data on the distant signals is, in fact, weighted by a measure of viewing, whether this takes account of the quality of the programs, or some sort of analysis of the time period in which the program was carried, for whatever reason, one gets a significant reduction in the "unexplained variance" -- to use a technical term here -- of the change in royalty payments, when one weights the hours by viewing.

We, therefore, prefer the equation as our sort of basic, or benchmark, or baseline equation as the equation in which hours are weighted by viewing.

I should say one more thing parenthetically. The results of weighting by viewing is, in fact, to reduce the share of Movies and Series, and to raise the shares of other program claimants so as, later on, when we come to talk about the difference between the weighted and the unweighted

results, the conclusion that the weighted analysis fit the data better is against the interests of the Movies' and Sports' Claimants. They get a smaller share in the weighted equation; nonetheless, we believe the weighted equation is, in fact, the one to use.

Q What are those measures of value called in statistical terms?

A They are the underlying coefficients in the equation that we estimated. You will see in the appendix the respective weights here are the coefficients in the equations that are reported in the appendix.

Q Can you determine relative marketplace value for each program category, from this approach?

A Yes.

Q And how do you do that?

A Well, a property of the way in which this analysis was conducted is that the coefficient in the equations that we estimated are, in fact, the appropriate relative shares to assign to each of the component groups. So, if our coefficient is .9 for one particular program category, that says, with some minor adjustments, that the marketplace data revealed, based on the actual operator choices, that that

particular program category would, in a functioning marketplace, obtain 90 percent of the royalty payments because it contributes 90 percent of the marketplace value of those signals.

Q Did you determine what those shares are, from your analysis?

A We did.

Q And what are they?

A Well, for the preferred equation, which is the one I'm going to put up here -- this is just repeating something I said at the outset -- for our preferred equation -- and, actually, for many of the other equations that we estimated -- for the preferred equation, the appropriate share for Movies and Series is 90 percent, for Sports it's 9 percent, for Devotional it's 1 percent. We actually estimate a negative share for Local program, so we put up a value of zero there. So, the result is that for the weighted regression, and for many of the others, the result is that there's a 90 percent share for Movies and Series, 9 for Sports, and 1 percent for Devotional.

Q Did you test those results?

A We tested them -- well, we tested them in a number of ways, but I suppose what you're getting at

is: Did we try to determine whether these results were sensitive to the various assumptions that we made about the underlying equation.

Q He's just like a cable operator, he can interpret my questions to mean exactly what he wants.

(Laughter.)

A We carried out a fairly detailed analysis -- in fact, a very detailed analysis -- the objective of which was designed to see whether the results for our preferred equation were sensitive to a variety of possible changes in the underlying assumptions. These are reported, actually, in some detail, starting, I think, on page 27 of my statement.

Let me just sort of give the bottom line. The bottom line is basically that the results are virtually identical for a wide variety of other specifications -- which is one of the reasons we have great confidence in the underlying results -- all except for the equation in which we use the unweighted data -- which we don't prefer, obviously -- where in that equation the estimated share for Movies and Series is, in fact, essentially all of the royalty payments. But, in fact, it's not an equation that we're prepared to defend, we are just reporting and, in fact, the difference between that and the preferred

equation is, in fact, substantial. In none of the other cases is there a difference of any significance.

We did several things, and let me just try to report them fairly briefly. We estimated the data for the period 1988-2 through 1990-2, five different changes, six different periods.

One of the questions was: Is the equation stable across periods, and so we tested by including a binary variable into the equation as a way of testing for what is sometimes called a "time" effect, in each of the periods asking, in fact, whether the equation was different among the various periods we analyzed because, in effect, we treated them as if there was a single homogeneous period.

The time effects were essentially not significant, indicating that there was, in fact, no difference among periods and, in fact, the coefficients changed virtually not at all when one included time effects.

Q And is that shown on pages 27 and 28?

A Pages 27 and 28 report those results. And you can see the shares are virtually identical, they are just like the .9 -- well, it's a little different -- almost 1 percent, and 8 percent for Sports.

On page 28, we report another analysis.

Here, we assumed the share summed to 1. In all the cases, by the way, we tested the proposition of the respective shares summed to 1 and, in fact, in a statistical sense, the sum of the shares never deviate significantly from 1 in any of the equations that we estimated. In fact, we ran an equation in which we assumed they summed to 1. In fact, those results are reported on pages 28 and the top of 29, as well as in the appendix. Again, you'll see the results are virtually identical to the ones in the basic equation.

A third piece of analysis reported on pages 29 and 30, at the top of 30, concerns a question of -- this dealt with our concern that because reregulation might have been anticipated by some of these signals, there may have been some changes in royalty payments -- changes in -- or retiering, I should say. In response to anticipated reregulation, we deleted all of the observations -- I've forgotten the precise number -- we deleted all of the observations in which the Basic rate was lower at the end of the period than it was at the beginning of the period. Took them all out, re-estimated the equation -- you can see the share of Movies and Series goes to 89 percent, and the share of Sports goes up some to about 10 percent. Again, not a substantial difference.

On page 30, we briefly report the results of the fact that -- in constructing the initial dataset, there were a number of signals -- or a number of reports from cable systems, to be more precise -- in which a signal was sometimes classified as local and sometimes classified as distant. The system didn't change its location and the distant station didn't change its location either.

We used a rule of thumb that if a signal was ever classified as distant, we classified as distant -- that is, in the basic analysis -- we classified as distant everywhere, in each period.

In this particular analysis, the analysis reported on page 30, we deleted all the observations that represented the dropping or adding or swapping of a reclassified signal, just to see whether, in fact, the reclassification made any difference. By the way, we independently verified that these, in fact, were distant signals but, nonetheless, out of an abundance of caution, we deleted them in a piece of analysis where we took those observations out. And, in fact, you can see there's no change in the results. I guess Movies and Series gets a slightly higher share here.

And, finally, on pages 30 and 31 -- the discussion is on 30 and 31, the results are in the

appendix -- we ran our regression in which -- or we estimate an equation in which we used unweighted hours. There, the result is the one I indicated before, basically all -- the only claimant that gets a positive share in that is Movies and Series. And, again, I'm not here to defend that particular equation, I just want to report that, in fact, the results are sensitive to the weighting. If you weight by viewing you, in fact, get a better fit for the equation and higher shares for Sports and Devotional Claimants.

Q Are there other changes that could have affected your results?

A Yes.

Q Did you test for those other changes?

A Yes, we did. The one effect that we were most concerned about was that there might have been simultaneous changes in other program services carried by cable systems, that is, services other than distant signals -- the addition of ESPN or USA might have affected the estimated value of the programs on the distant signals.

And, so, we conducted an analysis trying to determine whether, in fact, the changes that we had observed were, in fact, in a systematic way,

correlated with changes in the programming -- of non-distant signal programming on the cable systems we analyzed.

Q What findings did you --

A We concluded that, in fact, the correlations were non-existent and, therefore, it's highly unlikely that simultaneous changes in other programs might have affected our results.

Q Did you test to determine whether the sample was representative?

A Yes. As a final bit of analysis -- this is reported, I guess, now in the appendix, the very last page, Table 4 -- we simply wanted to determine whether or not -- and this is whether there was something particularly unusual about the cable systems' whose behavior we were analyzing. You can see there are some differences, but the differences are not very large. Even if there are differences, this does not necessarily mean that the results are in any way affected. The same underlying behavior might well be present for the included and the excluded observations but, nonetheless, you can see that the differences, while they exist, are not especially large. There's nothing especially peculiar about the 342 observations that, in fact, we analyzed.

Q What conclusions would you ask the Tribunal to draw, for distribution purposes, from your analysis?

A If the Tribunal is going to rely on operation valuations as a basis -- as one of the bases -- for distribution, that it ought to rely on a study of actual operator behavior, which we've conducted here, and that our analysis, which involved, I think, a very careful statistical work, particularly concerned about the sensitivity of the results to various alternative ways in which we might have gone about the analysis and, in fact, the Tribunal ought to conclude that, on the basis of actual operator behavior, 90 percent of the royalties ought to be distributed to the Movies and Series Claimants, 9 percent to Sports Claimants, and 1 percent to Devotional Claimants.

MR. LANE: Those are all the questions that I have on direct, Madam Chairman.

CHAIRPERSON DAUB: Thank you, Mr. Lane.

Before we go into cross, do the Commissioners have any questions?

COMMISSIONER GOODMAN: I have an enormous number of questions, but I tend to think that those will all be answered on cross-examination.

CHAIRPERSON DAUB: Just in case they forget or miss out, I'd like to ask you, did you personally conduct this study?

THE WITNESS: Personally -- yes. Not by myself but, yes, I was personally involved throughout.

CHAIRPERSON DAUB: You had a number of staff?

THE WITNESS: Yes.

CHAIRPERSON DAUB: During what period?

THE WITNESS: I believe probably it would be fair to say the work would have started perhaps last December.

CHAIRPERSON DAUB: Last December?

THE WITNESS: Yes. There were certainly preliminary discussions prior to that, but I think we began to get the first data from CDC, my best recollection is, about the first of the year, or December.

CHAIRPERSON DAUB: Did you make any personal contact to any of the cable operators?

THE WITNESS: I did not.

CHAIRPERSON DAUB: Did any of your staff?

THE WITNESS: No, I don't believe so.

CHAIRPERSON DAUB: One other thing, in the program categorization, did you have the Tribunal's

categorization in mind?

THE WITNESS: My understanding is that the data in the Nielsen -- the Nielsen data that we were supplied, my understanding is that, in fact, those are assigned in precisely the way that the Tribunal does its distribution which, in fact, I think is an important point I should have mentioned before.

I know there was some concern in the Bortz study as to whether or not the operators had in mind precisely the same program categories as did the Tribunal. I believe we are safe on that score because the programs, in fact, are in the categories, my understanding is, that the Tribunal, in fact, uses for distribution, which I think is actually another benefit of our study which I'm glad you asked about.

CHAIRPERSON DAUB: "Local" means local news programs produced by the station?

THE WITNESS: My understanding is shown only on a single station, correct.

CHAIRPERSON DAUB: Thank you, Dr. Besen.

Mr. Garrett, would you like to go ahead with your cross?

MR. GARRETT: Thank you, Madam Chairman.

Dr. Besen, I'm Bob Garrett, and I represent the Joint Sports Claimants. Good morning.

THE WITNESS: It's nice to see you again.

MR. GARRETT: Thank you, all things considered --

(Laughter.)

CROSS-EXAMINATION

BY MR. GARRETT:

Q Let me make certain I understand this, Dr. Besen. Your study shows that the relative marketplace share for Local programming is zero percent?

A Actually it says that, in fact, the estimated the coefficients are negative.

Q Negative. Does that mean that the NAB owes us money?

A I doubt that you can get it from them. Shall I tell you what it says? I'll be happy to tell you what it says.

Q Sure.

A It says that given the actual amounts of programming that were shown in this time period of analysis, if you ask the question: What would it take to get cable operators to pay for the amount that they actually had available to them if, in fact, that competition among local program owners to sell programs to them, if that competition would not produce a positive price.

Q They would get zero?

A They would get zero.

Q Now --

A Let me just say one more thing. That says that the marginal value of those programs is negative.

Q So, if the information before the Tribunal would consist solely of your study, my friends from NAB would get nothing in this proceeding?

A That is correct.

MR. STEWART: I wish you'd quit repeating that, Bob.

(Laughter.)

MR. GARRETT: You mean the part about being friends, John?

(Laughter.)

BY MR. GARRETT:

Q Dr. Besen, if I turn to Table 3 here, the penultimate page of your testimony, you set forth the relative shares there, under each of the different regressions that you've done, is that correct?

A That is correct.

Q And the one under Preferred, that means that that's the one that you prefer in this proceeding, is that correct?

A Yes, basically because it seems to us that

it uses the most data and that, in fact, when one tries the other variations, the results don't change very much.

Q And that's the one that takes account of viewing hours, correct?

A No, they all take account of viewing hours except the unweighted equation.

Q The unweighted is simply the amount of time that the programming is broadcast, is that correct?

A That is correct.

Q Now, under the Preferred analysis, I see that there's a little "asterisk" after Movies and Series, do you see that?

A Correct.

Q And there's another little "asterisk" after Devotional?

A Correct.

Q But there isn't a little "asterisk" after Sports, correct?

A That's correct.

Q Now, does that indicate that the number that you have for Sports is not statistically significant?

A That's what it says, yes.

Q And does that suggest then that you cannot

reject the proposition that the value for Sports could be zero?

A That is correct.

Q So that we might not be much better off than my friends from NAB?

A No, that's not correct. That's not correct.

Q We are better off than our friends from NAB?

A Yes, I think you are better off.

Q Well, certainly, you've given us 9 percent.

A Well, I think there's a reason for doing that. The best point estimate here is, in fact, the estimate and, in fact, we've used that.

Q But from a statistical standpoint, you cannot reject the proposition that our share would also be zero?

A That is correct.

Q Now, would that indicate then that the amount of viewing attributable to Sports programming may have no impact one way or the other on what you're trying to measure here?

A I don't think I understand the question.

Q Well, what does it mean to say that you can't reject the proposition that our share may be

zero?

A Every coefficient here is estimated with some error, if you like, and as an estimate of the precision with which that coefficient is estimated. So, there is, in fact, a range of possibilities. The estimated value is essentially the midpoint of it, and there's some distribution about it. The fact that zero is contained -- we can't reject the hypothesis that zero means that -- again, I hate to use technical terms here -- but plus-o-minus 2 standard deviations around the coefficient contain the value zero.

Q Can you reject the proposition that the amount of viewing hours to Sports has no relationship to what you're trying to measure here?

A I don't think I know what that proposition means. I can tell you the following: I can tell you that when we take into account Sports viewing hours, Sports does a lot better than it does if we don't take into account Sports viewing hours.

By the way, the comparison there is between the unweighted and the Preferred equation. If we hadn't taken into account viewing hours, we would have gotten literally a zero or, in this case, a negative value for Sports. You do better by weighting by viewing. We didn't do that because we wanted to make

you better, we did it because it improved the statistical precision of the analysis. And that's why we prefer it.

Q Thank you. How much did it improve it by?

A What?

Q How much did it improve it by?

A Significantly.

Q When you take a look at the amount of viewing that goes to Sports, we do a lot better than when you look at just simply the amount of time that we're broadcasting?

A That's correct.

Q I see. Under the unweighted where you simply look at the amount of time of broadcast, that's the one that gets MPAA 100 percent?

A Movies and Series Claimants get 100 percent.

Q So, you can do a regression analysis here that would result in MPAA coming away with the entire royalty fund, is that right?

A You could, but we're not recommending that one.

Q Well, you say it's not your preferred one.

A Correct.

Q Well, it might be MPAA's preferred one, I

suppose.

A You'd have to speak to them.

Q Now, as I also understand it, your study does not provide us any information about Public Television programming?

A That is correct.

Q Was it not possible to provide us any information about Public Television programming?

A During at least one of the time periods, there was no Public Television program data. So, if you recall, we did the matching of the observations with the program data and since for at least one of the time periods there's missing data on Public Television, it was not possible to do the analysis. I should have said this at the outset.

The shares that I'm talking about are the shares independent of whatever shares the Tribunal chooses to assign to Public Television, or any other claimant not listed here. So, this is the respective shares of the four claimant categories.

Q The reason you didn't do it for Public Television is you didn't have the viewing data for certain periods, is that right?

A I believe there were not even any hourly data.

Q Had you had hourly data or viewing data, could you then have done a regression analysis including PBS?

A Absolutely.

Q Would that have changed the results?

A I think not substantially, no.

Q Are you certain of that?

A Yes, I'm reasonably certain of it.

Q You also have combined here Movies and Syndicated Series, is that correct?

A That is correct.

Q Did you do any regression analysis that separated Movies and Series out?

A No, we did not.

Q That was your conclusion, to include Movies and Series together?

A Yes. If you recall my testimony last year, I argued that as the appropriate way to do that.

Q Now, Dr. Besen, as I understand, this marks your sixth appearance before the Copyright Royalty Tribunal, is that right?

A I don't know -- you're counting, I'm not.

Q I count for all of our witnesses. You testified in the 1979 proceeding, did you not?

A Your information about this is far better

than mine. The number seems to be about right.

Q Do you recall testifying concerning a regression analysis that had been presented by Dr. Landis of Lexicon?

A I do, indeed.

Q And that was in the 1979 proceeding.

A If you tell me that.

Q And you also testified in the '83 and the '89 proceedings, is that not correct?

A If you say so.

Q You testified in both of those proceedings on behalf of the MPAA, to criticize a certain study presented by Mr. Bortz, is that not correct?

A I'm appeared at least a couple of times doing that, that's correct.

Q And you've repeated some of those criticisms here in your testimony again this morning, correct?

A Correct.

Q And you've also appeared on behalf of MPAA in the 1989 proceeding to criticize certain information presented by Dr. Reid, another Joint Sports Claimants witness, is that not correct?

A I believe that's correct.

Q And likewise you had appeared on behalf of

the MPAA in the two rate adjustment proceedings before the Copyright Royalty Tribunal, is that not correct?

A I remember at least one, it's possible it's two.

Q One dealt with the imposition of the Syndex and 3.75 Funds, correct?

A I can remember that.

Q And you testified there on behalf of the MPAA, correct?

A That's correct.

Q And you also testified on behalf of the MPAA in the follow-up proceeding where the Syndicated Exclusivity rule, or the Syndex surcharge, had been abolished, correct?

A It's possible, I don't recall.

Q Well, you recall testifying that the Tribunal should keep the Syndex surcharge notwithstanding the fact that the Syndicated Exclusivity rules had been deleted?

A I believe I did. I don't remember that testimony at all clearly.

Q In the 1979 proceeding where you came in in rebuttal on the -- do you recall the regression analysis --

A I do actually remember that.

Q Did you review your testimony in that proceeding?

A For this?

Q Yes, sir.

A No.

Q Did you review the testimony you provided in that proceeding prior to preparing this study for the MPAA?

A I did not.

Q Do you recall the criticisms that you made of the econometric study, the regression analysis done by Professor Landis of the University of Chicago?

A I believe I can remember two major ones, yes.

Q What are those two major ones?

A The two major ones were, one, Landis claimed that Sports programs were three times as valuable -- I'm not sure of the precise number, some multiple of the value of Movies and Series programs, because of the greater propensity to carry programs -- carry distant signals that contained lots of Sports.

And the other criticism was -- the criticism of that was that, in fact, the respective propensities to carry did not have any values attached to them. There were no dollar signs in the analysis.

And, so, the greater frequency of carriage did not translate readily into -- in fact, it didn't translate at all -- into a dollar figure.

The other criticism was that the results seemed to be dominated by three observations, and that, in fact, the purported relationship did not really work if one excluded those and looked at all the remaining ones, and one should have -- if, in fact, the relationship was the one that Landis claimed, it should have held throughout the analysis -- throughout the entire dataset -- and, in fact, there was no relationship at all of the sort that he had claimed for the remaining observations.

Q Do you recall any of the other criticisms that you made?

A I can't.

Q Do you know whether or not any of those other criticisms would be applicable to your regression analysis?

A Since I can't remember them, I can't answer the question.

Q That's fair.

COMMISSIONER GOODMAN: May I ask a quick question, and that is, could you expand for a second on the concept of regression analysis?

THE WITNESS: Yes. I guess the simplest way to think about it is -- it's hard to think about it in a situation where we have more than one explanatory variable, so it's better to think of it as we're trying to relate some variable to another, to find out what the statistical relationship is between them.

What's a good example -- suppose you are trying to relate crop yield to rainfall. You would collect data on crop yield in various years perhaps, and rainfall in those years. You'd plot them. You'd plot the crop yield on the vertical and the rainfall on the horizontal. You'd get a bunch of points, maybe a scatter, and you'd try to fit a line to those points that best fits the data. The jargon here is least square. If you want a line that has -- where the deviations in the line when they are square and summed over all the observations provides the smallest number. You want that line that fits the data best. The usual criterion, the most universal criterion, is least squares. In fact, you're looking for a line that fits the data best.

And when you have the line -- to go back to my example -- you can say to yourself: well, if annual rainfall went up by 1 inch, what was the

increase in crop yield? And that would be the regression coefficient equivalent to the coefficients I've got here.

COMMISSIONER GOODMAN: Now, in your study, of course, there are more than two variables, or it could be an infinite number, I suppose, and you reduce that to a finite number.

THE WITNESS: No, there are only -- by and large, in the sort of simplest version of this, there are only, I guess, four right-hand side variables, which are the percentage changes in each of the four program categories. So, there are just four of them. And that's all we used.

Now, instead of a two-dimensional picture, if you could imagine a five-dimensional picture, which I can't, now imagine creating the best surface, five-dimensional surface to this --

COMMISSIONER GOODMAN: I'm not sure I do understand. What are the elements again, in your regression analysis?

THE WITNESS: This is an example of, if you like, a hypothetical or a typical observation. The equivalent -- the previous example I gave you was crop yield and rainfall. The equivalent of crop yield here is change in royalty payment. That's the variable to

be explained. That's the one on the vertical axis.

There are, unfortunately, lots of horizontal axes, or at least four, because there are four different variables, but the explanatory variable, the equivalent of the rainfall here are the change in Movies and Series, the change in Sports, the change in Devotional, and the change in Local programming, in percentage terms.

And exactly the same as in my crop yield-rainfall example, I'm looking for the curve, or the surface that best fits the data by standard statistical criterion. And the result of that are coefficients which tell you the respective shares preferably assignable to each of those categories.

To go back to another example I used before, the example of the automobile and its total cost and the components. It's exactly the same thing. People ran regressions in which the left-hand side, instead of being royalties or crop yield, was the price of an automobile. And what were the explanatory variables? -- like my variables here -- wheelbase, horsepower, whatever other characteristics I used. And this is a widely used technique for trying to determine the respective value of the components of bundles. People do this a lot for computers, for

example, trying to determine how much processing speed is important with respect to other characteristics of a computer. A rather substantial amount of work takes place in that area as well. But the regression is simply a statistical technique for, in fact, fitting a curve to data.

COMMISSIONER GOODMAN: And your regression analysis that we're concerned with would have royalties on the left side, and then over on the right side would have Movies/Series, Sports, Devotional, Local?

THE WITNESS: Correct, except that they are in percentage terms, but that's exactly right. And we're talking about the best fit to those data using observations from the cable systems' actual choices.

It's just like the question of buying a car. We observed people actually buying them, actually buying the distant signals, which consist of components, and now we want to figure out what the components are worth.

COMMISSIONER GOODMAN: On the car one, you would have on the left the price of the car and on the right would be styling and drive train?

THE WITNESS: I think the ones they actually used were like -- the early ones were

horsepower and wheelbase. People have done this for agricultural products, a whole variety of different --

COMMISSIONER GOODMAN: Conceptually, it seems mind-boggling to me that you can attribute the value of a car with wheelbase.

THE WITNESS: Well, that may not be a good measure, but only statistical analysis can tell. These equations fit the data reasonably well. It turns out these coefficients are significant. The answer is, we can explain the royalty payments by changes in Movies and Series program hours, or Devotional hours, or Sports hours. We can do so.

BY MR. GARRETT:

Q Or try to attribute the value -- or what portion of the value -- strike that.

Did you ever try to attribute the portion of value of a car to whether or not it has an engine?

A Did I ever do that?

Q Yes.

A No, I never did that.

Q Did any of your studies ever do that?

A I never did a study of that. I'm describing work that's rather widely known and well respected in the economic profession, in which people do exactly what I just described.

Q Now, going back to Dr. Landis' testimony -- and it seems just like yesterday --

A You've been in this room too long.

Q They don't let me leave.

Do you recall the results that Dr. Landis came up with in his regression analysis?

A The only one I can remember is the one I reported to you earlier.

Q Do you recall what his conclusion was as to the relative marketplace shares?

A The only thing I can remember is somehow that something was three times as -- he may have said "valuable", but I'm not certain.

Q Do you recall that Dr. Landis had run his regression analysis once with the category of Movies and Syndicated programming combined and once where he did it separately?

A I don't remember that.

Q Do you recall that he got different results when he did it that way?

A I don't remember.

Q Do you recall that, in fact, he found that the results for Syndicated programming were not statistically significant in that case?

A I don't remember.

Q You do remember your criticisms of the study, though?

A The ones I remember, I remember quite clearly, yes.

Q Well, I do, too.

Let me have marked as Sports Exhibit 6-X, the document which I'm handing the Court Reporter. Madam Chairman, I have marked yours specially Sports Exhibit 6-X, since you were the only one who complained about my not marking them.

(Laughter.)

(Whereupon, the document was marked for identification as JSC Exh. No. 6-X)

Madam Chairman, I had conferred with Mr. Lane earlier and indicated that I'd be introducing this exhibit here. Dennis, you can correct me if I'm wrong -- but this represents the viewing hours data upon which Dr. Besen relied in doing his different regression analyses. Is that a fair statement, Dennis?

MR. LANE: It represents both the time and viewing data, I believe.

BY MR. GARRETT:

Q Dr. Besen, can you identify this document here?

A No, I can't. I believe this must have been a file we supplied to you on a diskette, but I haven't seen this particular format.

Q And your understanding is correct. And, Dennis, you correct me if I'm wrong -- but as I understand it, the numbers at the top -- well, let's go back.

There is a column called Station there, do you see that?

MR. LANE: Me? Yes, I do see that.

MR. GARRETT: Dennis, could you just sit over there?

(Laughter.)

MR. GARRETT: I'll try to make this simpler. My understanding is that all the data up on the top of each page references the number of hours, the broadcast hours of the different program categories on the various stations identified, and that the numbers on the bottom represent the amount of viewing hours.

MR. LANE: Where there is a "V", that means viewing. If you see a "V" in front of Movies, that's viewing hours associated with Movies. If you don't

see a "V" in front of the category name, it's the hours.

MR. GARRETT: And I believe you will find at the top of each page it's just simply hours, and at the bottom of each page you've got your little "V" there for viewing hours.

BY MR. GARRETT:

Q Now, Dr. Besen, as I understand it, you relied upon six-cycle viewing data, is that correct?

A I believe, if I got the terminology correct, there were some observations that did not have six months of data, in which cases we inflated the six months of data to make everything comparable.

Q Now, as I understand it, for some of the observations you had six-cycle data supplied to you by MPAA, correct?

A That's correct.

Q And in some instances, you had data for five cycles supplied to you by MPAA, correct?

A I believe that's correct.

Q And in those cases, you grossed them up so that they became six-cycle data, correct?

A Yes, because we're were using the percentage changes, and it wouldn't have made much sense to compare percentage changes where we were

comparing different numbers a month between periods.

Q And in some instances, you only had data for four cycles, correct?

A That's correct.

Q And you again grossed those up to make them six-cycle data as well, correct?

A That is correct.

Q and all of the data that you have here were, in fact, taken from the viewing studies that had been conducted by Nielsen for MPAA, correct?

A Yes, except that in some cases we corrected some obvious sort of mathematical errors -- where components didn't add to totals, we went back to MPAA and verified the numbers.

Q Would any of those corrections affect their 1990 numbers that they put in? -- by chance -- I'm just fishing here.

A I have no idea.

Q The data for 1988 has never been presented to the Tribunal in a Phase I proceeding, is that your understanding?

A I don't know.

Q And the six-cycle data that you have here for 1990 has also never been presented to the Tribunal, has it?

A I don't know.

Q You are aware, are you not, that the Tribunal, in the 1989 proceeding, had been presented with six-cycle data?

A I'm not aware of that.

Q Were you aware that the Tribunal, in its Final Determination for the 1989 case, felt that the two additional cycles here, the fifth and sixth cycles, were unusable for Tribunal purposes, and the agency limited its decisionmaking process to four-cycle data?

A I did not know that.

Q Do you know why it is that the Tribunal found that the six-cycle data were unusable for its purposes?

A Nope.

Q That's not something that you had considered when you were preparing this study for MPAA?

A That is correct.

Q Does it make any difference to the results of your study, whether the viewing data that you relied upon here are accurate?

A It would depend on the nature of the inaccuracy.

Q Some inaccuracies might affect the results and some might not?

A Well, the point is that there are two different issues here. One is the question of whether the estimates are affected, the actual estimates, and the second is whether the precision of those estimates is affected.

Certain kinds of errors, for example, if they are errors that are offsetting, would have the result of making the estimates, in some sense, less precise, but would not, in fact, bias them in any particular way.

Q As of the time that you had formulated and conducted this study, you had not considered whether the problems that the Tribunal found would be -- six-cycle data in the '89 proceeding -- would, in fact, change the results of your --

A That is correct.

Q Let me ask you this, Dr. Besen. Are you familiar with the term of "Syndex-proof superstation"?

A I guess so, yes.

Q What is your understanding of a Syndex-proof superstation?

A It's a station that carries programs that local cable systems are not obliged to black out.

Q Do you know which stations are, in fact, Syndex-proof?

A I don't know, no.

Q Were you aware that stations WGN in Chicago and WWOR in New York are Syndex-proof superstations?

A They may be.

Q And do you know how those stations become Syndex-proof superstations?

A I assume they acquire rights from copyright owners for that purpose.

Q Well, were you aware of the fact that the resale -- you know what a resale carrier is, don't you?

A Yes.

Q Are you aware of the fact that the resale carriers of WGN and WWOR actually black out certain of the programming?

A I know that's true in some cases.

Q Are you aware that they, in fact, substitute other kinds of programming for that that's blacked out?

A I understand that, yes.

Q Do you know whether or not the data that you've relied upon here contains any viewing data with respect to the substituted programming?

A I don't know.

Q Do you know whether or not the viewing data provided you by the MPAA reflects viewing to the programs were not substituted?

A I don't know.

Q You haven't made any inquiry about that?

A That's correct.

Q Now if, in fact, the data that you've relied upon here do not accurately reflect all of the viewing to a particular program category, would that affect the results of your study?

A I don't think I understand the question.

Q Well, assume that the data that you have relied upon here did not contain the viewing to all of the programming in a particular category, would that fact affect your results?

A It could. But, again, it's a question of whether it, in fact, biases in any way or, in fact, simply adds to the noise in the data.

Q But that's not something you've considered.

A That's correct.

Q You haven't looked into the fact as to whether or not the practice of substituting programming on Syndex-proof superstations is going to affect the results of your study?

A That's correct.

Q And that's not at all comparable to the types of criticisms that you might have had of the Landis study, by any chance?

A I'm not sure I know the connection.

Q Okay. Dr. Besen, you've got results here for 278 cable systems, is that correct?

A The total number -- in the Preferred equation, the one with the most -- using the most data, that was the number of different cable systems. The number of observations is obviously somewhat higher, 350-odd -- 40-odd.

Q And the difference is attributable to the fact that certain cable systems may have added or dropped more than one signal, correct?

A No, would have appeared in more than one period.

Q Do you know how many total -- these are all just Form 3 cable systems, correct?

A That is correct.

Q Do you know how many total Form 3 cable systems --

A I think my testimony indicated approximately 1200, I believe.

Q Well, that's -- and I wouldn't want to

argue with you, but isn't that a little low, Dr. Besen?

A For the total number of Form 3 systems?

Q Certainly.

A It was the number that I think we were provided data from Mr. Larson.

Q Well, would it surprise you to learn that Mr. Larson had provided me with data showing that there were about 2400 Form 3 cable systems in 1990, and about a like number in each of the earlier years?

A It would surprise me. Excuse me just a moment -- these were all the systems for which there was a reported change in the carriage. That's the list of systems that we got.

Q So, that would explain the difference between the 1200 and the 2400?

A Correct.

Q You were only looking at systems that made some change during this period?

A Where there was a reported change.

Q Where there was a reported change.

A Correct.

Q I see. Anyone who didn't report a change during this period, you didn't examine, correct?

A That's correct. Recall, the reason we were

interested in instances where there were changes was because we wanted to isolate the effect of changes in the carriage of programs. And so we were not interested in observations where cable systems did not change the complement of distant signals they carried.

Q I see. Well, just take, for example, a cable system had added a distant signal maybe in 1983 -- WGN, which carries the Chicago Cubs -- and carries that signal consistently throughout the period '84, '85, '86, all the way through. Now, that system you would not -- you had not looked at.

A It would depend on whether it changed any other signals during the period of analysis.

Q Well, let's assume for purposes of my question that it did not. It added one signal, WGN, in 1983, and it consistently kept that signal to this very moment.

A And all other signals.

Q And all other signals.

A Correct, it would not appear.

Q Now, it is true, is it not, that the particular cable operator in that case, would have to make a judgment twice a year, as to whether or not to keep that particular signal?

A That's correct.

Q He would have to make a determination as to whether or not the value of that particular signal, and the programming on that signal, was worth paying whatever it was paying in royalties?

A That's correct.

Q But you haven't examined that kind of a system?

A Well, you have to go back to the fundamental way we approached this analysis. At the outset, there was a concern that the effects we were trying to look for were going to be fairly subtle and difficult to detect. Therefore, we sought observations where there were large changes in programming carried on distant signals between periods.

We could have looked at period-to-period changes for a given complement of signals, but the concern was -- and we never pursued this line of analysis because we did not think it was likely to be fruitful -- we could have looked at the changes on the program -- for example, GN -- between periods, and related that to royalty payments.

In order to -- it is not a simple matter -- I hope you appreciate that it's not a simple matter -- to try to isolate the effects of interest here. And

one way to go about doing so is to look for instances in which the variable effects you're most interested in is changing by large amounts. And that was, in fact, a fundamental premise of the way we conducted our analysis.

Q Let the record reflect that he moved my easel without my permission.

A I thought we had your permission.

MR. HOLLAND: I beg to differ.

MR. GARRETT: I was going to charge you, and they said you wouldn't pay.

(Laughter.)

BY MR. GARRETT:

Q Dr. Besen, you've got a cable operator who, in 1983, adds WGN and increases its royalty payment by $10,000, okay? Will you assume that for me?

A Fine.

Q And at the end of the year, he looks at WGN and says, "It's now going to cost me $15,000", either because his Basic rate has gone up or because the number of subscribers has increased or both, right?

A If you say so.

Q Well, I am correct, right, that the cost of carrying that signal can change simply because the number of subscribers increase or the Basic rate

increases, right?

A That's absolutely correct.

Q I mean, royalty payments are tied here to the cable operator's Basic receipts?

A Precisely.

Q And then in 1985, he looks at it again and says, "Now it's going to cost me $17,500", will you accept that?

A Correct.

Q And under your analysis, he's saying to himself, is it worth paying yet another $2,500 for that particular --

A Correct.

Q And at some point, you talked about rate deregulation, correct?

A I did.

Q And that kicked in, what, at the end of 1986, beginning of 1987?

A I believe so.

Q And so in 1987, all of a sudden, he doubles his Basic rates, and now he's paying $30,000 for that particular distant signal, right?

A Fine.

Q And, again, he has to make a judgment, does he not, that that signal is worth $30,000 to him?

A Absolutely correct.

Q Now, as I understand it, you did not -- strike that.

You didn't draw a random sample?

A We tried to take every observation that met our criteria.

Q But one of your criteria would not have been a situation like the one I just described.

A That is correct, for perfectly good reason.

Q Well, I'm sure Dennis will explore --

A Well, I'd like to answer it because you've made --

Q Well, Stan, go ahead, but I want you to know that I've got to be done by lunchtime.

A Well, this will be very brief. You've basically just made my point, and I'd just like to sort of make sure that everybody sort of appreciates it.

There are a lot of things that can cause the royalty payments on a system to change. You've got lots of examples of them. If you want to isolate the effect of a change in distant signals and, therefore, the programming on those signals, you want to find instances where that's the biggest factor that's affecting the changes, and the way to do that

is by looking at changes. You won't get it by doing this.

There is an economic problem and a statistical problem. You want to isolate the effects of the programs on the distant signals from all the other things that may be causing royalties to change. And the way to do that is by focusing on observations where the changes in distant signals are the largest thing that's changing. It's a way to separate it from the surrounding noise. There's noise, you want to obtain information about the signal, and the way to do that is to make sure that the effect that you're looking at, the variable whose effect your are looking at is changing by a large amount relative to all the other things that may be changing the results. So, in fact, that's precisely why we didn't look at observations like that.

Q As I understand it, in your final paragraph here you indicate that you think that the observations that you have are representative of the larger universe, is that correct?

A Yes, they don't seem to differ tremendously from them.

Q And the criteria on which you measure that are set forth in your final table, Table 4, is that

correct?

A I'm sorry, I don't know what you mean by -- there are no criteria in the final table. Oh, yes, it is the factors that we compared them by. If that's what you mean, yes.

Q Did you compare any other factors?

A No, we did not.

Q You looked at Basic rate, and you found that they were roughly the same?

A Roughly the same, correct.

Q And number of subscribers, you considered the difference of about 5,000 subscribers not significantly different?

A Well, they are statistically different, but they are not -- what I would say is, they are not different enough to likely have affected our results. And, remember, the means could be very different between the groups, and the relationship could be the same for both of them.

This is simply an attempt to see very roughly whether the systems look very different. They don't.

Q And that would also be true on the final factor there, the number of distant signals?

A That's correct.

Q I mean, there's like a whole signal difference there that you don't consider?

A Yes, I don't believe that would have affected the results.

MR. GARRETT: I have no further questions. Thank you, Dr. Besen.

CHAIRPERSON DAUB: Thank you, Mr. Garrett.

Commissioner Goodman?

COMMISSIONER GOODMAN: Let me go back to the WGN analysis. I'm trying to better understand the way you value the signal. If, from one year to the next, the Chicago Cubs were to go from last place to first place.

MR. GARRETT: Never happen.

(Laughter.)

COMMISSIONER GOODMAN: Philadelphia Phillies.

THE WITNESS: This is a hypothetical, I assume.

COMMISSIONER GOODMAN: Let's say they went from first place to last place then.

MR. GARRETT: I can't imagine them ever being in first place, but I'm sure there's a regression analysis in there.

MR. PORTNOY: Your assumption is flawed.

(Laughter.)

COMMISSIONER GOODMAN: Let's assume that you went from low-ranking to high-ranking, and became extremely popular throughout the nation. And let's also assume that the cost went up for whatever reason, to carry that distant signal from one year to the next.

Would your analysis take into effect the qualitative enhanced attractiveness of the Cubs programming?

THE WITNESS: I think there are two parts to the answer. If it's an example like Mr. Garrett's hypothetical here, we would not have even analyzed that observation. Okay. The question would be, what if WGN was added in this period? And the answer is, only to the extent that it shows up in viewing hours would this effect be present.

There are lots of things that are going to affect royalty payments made by a system. Our claim here, and I think it's a valid one, is that we've been able to isolate the effects of the changes in the program hours, or in the weighted program hours, on the royalty payments that are made. Those effects are measurable, statistically significant, robust with respect to variations in the underlying -- in the

various ways we've might have conducted the analysis. So, in that sense, we've isolated those effects.

As in any statistical analysis, there always remains some unexplained variance. As a matter of fact, for analysis of this type -- a cross-section analysis using changes in the data -- we explain a quite respectably large proportion of the variance in royalties, and that's what gives us confidence in the results. The results are large and significant. They are highly unlikely to have occurred due to chance.

That is not to say that there are no other factors at work here. We don't explain all of the variation, but we explain a decent amount of it, and we explain on the basis of an important characteristic of the distant signals, and that's what gives us confidence.

COMMISSIONER GOODMAN: In this particular example, would you -- are you saying that would account for the enhanced value of WGN due to the enhanced attractiveness of the Cubs, because of the additional viewing?

THE WITNESS: To the extent that that's reflected in extra viewing, that would, in fact, be taken into account, yes.

COMMISSIONER GOODMAN: If it was not an

appreciable -- if it was not an increase of any kind in viewing of the Cubs games, then you would assume that it was -- I better not assume -- incorporated into your data, your analysis would be that there was no enhanced attractiveness?

THE WITNESS: If you were adding WGN, then you would take into account the fact that WGN has some amount of Sports programs, and some amount of Local, and some amount of Devotional, and some Movies and Series, and you would measure the extent to which -- you would measure the percentage increases in the programs in each of those categories, as a result of carrying WGN or adding it to your complement. Those are the characteristics whose values we analyzed, weighted by a measure of viewing, and it's only those factors that we could possibly take into account in this analysis.

COMMISSIONER GOODMAN: Let me ask you another factor, and I'm not sure how one weights this as a negative the way you did. I'm not even sure my assumption is right, but I'll make it anyway -- and that is that there are some types of programs that are inordinately important to the person who is making the decision to subscribe to cable. For example -- certainly this would be true -- a Sports fanatic would

be disproportionately caused to subscribe to cable that he could get Sports, than somebody who didn't care very much about Sports and just loved the different programs. I mean, Sports wouldn't be a major factor, obviously, in the non-fanatic's consideration of that.

THE WITNESS: Yes.

COMMISSIONER GOODMAN: Would that be picked up simply by the fact that there would be increased viewing because the fanatic would watch it more?

THE WITNESS: No. No. Even with respect to hours, suppose that the programs -- if it were true that a distant signal that contained lots of hours of Sports -- let's leave viewing aside -- had lots of hours of Sports, were disproportionately valuable -- valuable in the sense that cable operators are going to pay a lot for distant signals that contain a lot of Sports, which is the analysis that we're doing here, that, in fact, that would show precisely in the data. The data tell us how operators value these distant signals.

Why do they value them? They value them because of their ability to attract Basic subscribers, to raise subscriber rates to Basic subscribers because they may attract Basic subscribers who take Enhanced

Basics, or Pay, or pay additional advertising. Those are all reckoned in the calculus of the operator, reflected in his willingness to pay for those signals.

If it turned out that Sports was enormously valuable in the sense that people really basically wanted distant signals because of their Sports programs, that, in fact, that should show up in our results with a much higher share of Sports. We give Sports either hours or viewing. We give them every opportunity -- there's nothing about the analysis that would have prevented Sports from having a 50-percent share, or 75-percent share. Based on the behavior of operators choosing which signals to carry, how much to pay for them, and what they contain, we're able to determine the respective value of the components -- just like the wheelbase and the horsepower -- and if Sports had a very high value, it ought to turn up in our data. All I can tell you is what turns up in the data based on an analysis of what operators actually did.

Operators ought to make those decisions based on their ability to attract viewers, for example, or attract subscribers, and that ought to show up here.

COMMISSIONER GOODMAN: Let me ask one more

question, and I'd appreciate your help. Maybe I've gone past the study too far, or maybe I need to go back for a study, because I'm still having difficulty fully understanding it.

The major hurdle, it seems to me, in an analysis of this type, is to break down among the program elements within any distant signal, the attractiveness. In other words, you see that the cable operator has decided, for whatever reasons, that he's now willing to spend $31,000, or $31,000 additional, and then the key to the importance of your analyses are that you can ascribe the value within that distant signal, to different elements. For example, Sports and so on.

THE WITNESS: Precisely correct.

COMMISSIONER GOODMAN: The way you were able to break that down -- and really simplify this for me -- is what, viewing?

THE WITNESS: No. Let's leave viewing out for just a moment. I think that's causing some confusion here. Let's suppose, in fact, that the only thing that gave the program the components were just hours. The way we're able to do that is by observing that people pay more for -- are willing to pay more for distant signals that contain more programs that

have high value.

Let's go back to my example of horsepower. If we can figure out how much more people are willing for 10 more horsepower, we can ascribe a value -- we have observations on -- this is the simplified because it doesn't require a statistical analysis. But if I had one care that cost $100 and has 100 horsepower, and I have a second car that cost $200 and has 150 horsepower, and everything else is the same, then I can say that that extra $100 can be related to that 50 extra horsepower. I can put a value on the additional horsepower.

That's what we're doing here except that it's more complicated to do because we don't have nice, easily-matched observations. So, we have to use statistical methods to do that, but it's exactly the same as doing that. People are putting higher values on distant signals that contain programs that are more valuable, and it's that insight that permits us to disentangle the separate effects of the components.

COMMISSIONER GOODMAN: How do you know which program within that distant signal is the one that has the high value?

THE WITNESS: All the programs are treated as a category. We are using the same program

categories the Tribunal does.

COMMISSIONER GOODMAN: I meant to say category.

THE WITNESS: Which category has the value?

COMMISSIONER GOODMAN: How do you know which category is the one that brings all that value?

THE WITNESS: Again, to oversimplify. If it were possible -- if the only two observations in the world were two distant signals which people paid $100 for one and $200 for the other, and one had one more Sports program than the other. If that was the only thing, we would say that additional Sports program was worth $100.

COMMISSIONER GOODMAN: But why? Why couldn't it be -- well, let's use that example.

THE WITNESS: Fine. The point is that "an" extra program is worth $100. We don't ascribe it to any particular program within the category.

COMMISSIONER GOODMAN: Why couldn't the value of program number one be worth $100 more than the other distant signal, and the second program was of zero value. Let me give you an example. Let's say that WGN had two programs all day. That's all it had. Program number one was the Chicago Bulls basketball game, enormously valuable. Program number two was the

Chicago Cubs Minor League Team, of less value. The value to that, it seems to me, would be overwhelmingly ascribed to the Bulls.

THE WITNESS: The task of the Tribunal were to assign royalties to particular programs, we might have gone about this quite differently. If the program categories were different, we might have gone about it differently.

Our task, as we understood it, was to assist the Tribunal in assigning the royalties to the categories the Tribunal actually faces.

COMMISSIONER GOODMAN: Then my example was a bad one. Let's say there's two programs, and only two programs, on WGN. Program number one is the Chicago Bulls. Program number two is a different category. It's going to be Movies/Series, and it's Petticoat Junction, or Tugboat Annie Rides Again. And let's assume for a second those latter programs have less value than the Sports programs.

THE WITNESS: Fine. Very easy. Let's suppose that we have three -- we need three different stations to do your analysis. One of them carries both of them, one of them carries one of them but not the other, and vice-versa. One carries just the Sports, one carries just the Series, one carries both.

The question is, how much less each of the ones that just has the missing one -- how much less royalty payments do they pay for the one that is missing. And that permits you to ascribe, if you like, the marginal value of each of the two program categories.

If that was the simple setup, you could, in fact, infer the incremental value because, in fact, in your example, if it were true, you would observe that the system with just the Bulls, just the one, would be paying some number, and the one with two would be paying only a small extra amount. And, similarly, the one with just the hypothetical series would have a small number and, therefore, we'd ascribe a very big amount to the Bulls because he would be paying very little.

That's exactly what we've done. It's just that now, instead of having nice just sort of three systems to compare, we have lots of systems to compare, and lots of variation, and our analysis does exactly what you want us to do.

You want us to, in fact, determine the effect of an additional program of a given type, or additional hour of programs of a given type. That's exactly what we do.

COMMISSIONER GOODMAN: I think I

understand. I think that if Mr. Lindstrom were here, he would go over to the easel and say, "Here's how we make up for that", and that is with the additional signals. The problem with my example is you only had one or two stations. You're saying that if you have a given, a sufficient number of distant signals, and we measure them all, we're going to start finding correlations, and we're going to start determining the values of those Movies/Series vis-a-vis the Sports because it will come out because you are comparing --

THE WITNESS: That's correct, and it goes back to the point earlier about fitting the curve to the points. The points are these observations in this multi-dimensional space that we talked about before are, in fact, exactly these combinations of programming and prices. And, in fact, you're exactly right. When we fit an equation to them, we do exactly what we do, or could do, if it was a simple world with two programs and three systems. It's just more complicated because there are more systems and more programs, but we can do it, and we do do it.

COMMISSIONER GOODMAN: Thank you.

CHAIRPERSON DAUB: Mr. Garrett?

MR. GARRETT: Would you call me Dr. Garrett?

(Laughter.)

I'm sorry, could I just ask one brief question here?

CHAIRPERSON DAUB: Yes.

BY MR. GARRETT:

Q Dr. Besen, you're familiar with what a 3.75 signal is, are you not?

A I am.

Q And you understand that when you add a 3.75 signal, that could also have a significant increase on your royalty payments, correct?

A But that would show up, in fact, in the data. If you were adding a signal that was a 3.75 signal, that would, in fact, precisely be a signal you would add only if, in fact, the programs on it were highly valuable. It's precisely those kinds of situations that permit us to do the estimation that we're talking about here.

Q I understand. Did you include then in your study situations where a 3.75 signal was included?

A There may be some. The question we asked was, how much did the royalties change when you added a signal?

Q Did you exclude any instances in which someone added a 3.75 signal?

A Absolutely not.

Q You indicate here that where there were some very large increases, you excluded them because you thought that they had to do with "retiering", do you recall that?

A There were a few instances -- exactly -- where we thought that there might have been retiering, exactly.

Q But none of those situations would involve 3.75 signals, did they?

A We certainly did not eliminate any observation because it involved the addition of a 3.75 signal.

Q Not consciously, or unconsciously?

A I'll accept that.

Q And I take it you cannot tell me how many 3.75 signal situations you actually observed?

A That is correct.

MR. GARRETT: Thank you very much, Dr. Besen.

CHAIRPERSON DAUB: Thank you, Mr. Garrett.

We will recess for lunch, and we come be back at 1:30.

(Whereupon, at 12:00 noon, the luncheon recess was taken.)

AFTERNOON SESSION

(1:40 p.m.)

CHAIRPERSON DAUB: Back on the record. Mr. Stewart, would you begin your cross-examination of Dr. Besen?

MR. STEWART: Thank you.

Good afternoon.

THE WITNESS: Good afternoon.

MR. STEWART: My name is John Stewart, and I'm representing the much maligned National Association of Broadcasters -- or maligned by you, in any case.

(Laughter.)

THE WITNESS: I'm sorry.

MR. STEWART: I'm sorry, I withdraw that characterization.

CROSS-EXAMINATION

BY MR. STEWART:

Q Would you turn to page 4 of your statement, please.

A (Complying.)

Q Would you read, please, the sentence that goes from the bottom of page 4 over to the top of page 5?

A "This means that one must measure what

operators are willing to pay for programs by observing what they actually choose to pay for them."

Q "One must measure what operators are willing to pay for programs", is that what you said, "by observing what they actually choose to pay for them", is that correct?

A Correct.

Q And is that what you contend your study measures?

A Yes. The quotations seem a little odd, as one is in the middle of a sentence.

Q I quoted two different phrases.

A Oh, I'm sorry.

Q I didn't know you were a grammarian as well.

A Fine. There's a dot, dot, dot in the middle.

Q Here, let me just do it right.

A It's all right. It's fine.

Q I understand, if you're offended --

A No, no. I'm not that easily offended.

Q All right. Let's make this a little more concrete. I'd like to posit an actual cable system and, for purposes of illustration, look at this cable system's carriage of stations over three periods.

Let's call them the second half of '89, first half of '90, second half of '90. So, 89-2, 90-1, and 90-2, okay?

A Fine.

Q Now, this cable system carries distant signals A, B, C, and D in the second half of 1989; distant signals A, B, C, and D in the first half of 1990; and distant signals A, B, C, D, and E in the second half of 1990. Okay, do you have that?

A I do.

Q Now, this is a Form 3 system. I'm going to assume that this is a Form 3 system. Are you familiar with the distinction between a Form 3 system and a Form 1 or Form 2 system?

A I am.

Q Now, let's look at what the cable operator actually does in this circumstance. First of all, I think that Mr. Garrett pointed out and you agreed, a cable operator makes a decision to carry A, B, C, and D -- at what point in time do you think that the cable operator makes a decision to carry A, B, C, and D in the second half of 1989?

A I presume sometime before the period starts.

Q And the same cable operator would make

decisions to carry those four signals again sometime before the beginning of the first half of 1990, correct?

A I would assume so.

Q And then the same cable operator makes a decision sometime before the beginning of the second half of 1990, to carry A, B, C, D, and E as well? Okay?

A Fine.

Q And you're comfortable with the premise that the decision is made before the carriage commences?

A I haven't thought about it, but that seems reasonable at this point.

Q You haven't thought about it. Okay.

Now, what periods of time are covered by an accounting period, do you know that?

A Precise period in terms of calendar time?

Q Yes.

A I believe it's the first half and the second half of the year, but I'm not certain.

Q January 1 to June 30, okay, and July 1 to December 31?

A That sounds fine.

Q Now, at the point in time when -- let me

ask you this question. When does the cable operator, Form 3 cable operator, pay for carriage of distant signal E?

A In the period when it adds it.

Q At what time during the calendar year?

A I'm not certain. You may recall in the paper, we indicate that we do not know when within the accounting period of a station a system has added a particular signal, so we treated them as if they were added for the whole period.

Q So, it's your understanding that at whatever point during the second half of 1990 it was added, that's when the cable operator begins to pay for the carriage of E?

A I guess, I'm not certain.

Q Let me help you with this. You know that cable operators file statements of account with the Copyright Office?

A I do.

Q Do you know whether they are filed before or after the accounting period?

A I assume they file after.

Q Right. And do you know whether the cable operator pays any money for the carriage of distant signals before or during its carriage of a distant

signal?

A I'm not sure I understand the question.

Q Would you take it as an assumed fact then, for our discussion purposes, that the cable operator first pays royalties for the carriage of station E sometime during the first couple of months of 1991, after the carriage is completed for the six-month period ending December 31, 1990-2?

A Fine.

Q Now, do you know how that cable operator would know how much he's going to pay in 1991 for carrying station E in the second half of 1990?

A It would depend on some estimate of his Basic revenues, and at whatever point on the fee schedule he appears.

Q Explain what the fee schedule is.

A I'm not sure what the precise numbers are anymore, but the schedule is one in which you pay a different amount for some signals than for others because of the fact that the signals beyond those authorized by the FCC, in whenever it was, 1978, are, in fact, paid for at a higher rate than the ones authorized at the time.

Q Are you familiar that there is also a distinction -- you were just referring to the 3.75

rate, correct?

A Correct.

Q Are you familiar with the fact that there's also a distinction in the rate paid for stations not carried at the 3.75 rate?

A I'm sorry, I don't understand. You mean as between Independents and Affiliates?

Q There is that distinction.

A I'm aware of that.

Q Are you aware that there's another distinction as well?

A I'm not sure what you're referring to.

Q Okay. Take this also as an assumed fact, that for Form 3 systems -- and laying to one side 3.75 stations -- the first DSE is paid for at the rate of 0.893 percent; each of the second through fourth DSEs are paid for at the rate of 0.563, and the fifth through nth are paid for at a DSE rate of 0.265 percent. And then there's the 3.75 percent rate. Okay?

A Fine.

Q Okay. This Form 3 operator knows that this is the fee rate schedule that will apply to distant signals he adds in 1990. Will the cable operator know at this point then, exactly what the dollar amount

will be for the carriage of station E?

A I presume he gets an estimate of what it would be.

Q Why do you suggest it's an estimate?

A Well, he doesn't quite know what his revenues are.

Q His revenues for the second half of 1990, which hasn't yet begun?

A I suppose.

Q And do you know against what revenues the rate is applied?

A Basic subscriber revenues.

Q That's total gross receipts?

A On Basic service.

Q So, he doesn't know until the end of 1990 sometime, exactly how much the total gross receipts were for the period ending at the end of 1990?

A I presume not.

Q So, at the point at which he makes a decision to carry E, he doesn't know exactly what the price of E is going to be, does he?

A No.

Q He knows what the rate is going to be, and he may have an estimate, good or not good, for what his gross receipts are going to be, right.

A That seems correct.

Q Now, if you asked the cable operator at the end of 1990, he would have a much better idea than a cable operator in the middle of 1990, or the end of 1989, what his gross receipts for 1990 were going to be, wouldn't he?

A After rather than during?

Q Yes.

A Yes, of course.

Q Now, let's look again at this decision to carry station E. What does the cable operator know about the programming on station E?

A I presume he knows what it carried in the most recent period.

Q What it carried?

A What it was carrying at the time he chose to add it.

Q Okay. And does programming --

A Of course, that's true of A, B, C, and D, of course, as well.

Q We'll get to that. Does programming on stations change from time-to-time during the year?

A It does.

Q And in some cases, seasonal program, such as baseball games, changes quite substantially from

time to time during the year?

A I suppose.

Q And fall season changes often happen, and there may be new programs added at the end of the summer, that weren't carried in the first half of 1990 or at any previous time, right?

A Possibly.

Q And if this cable operator wasn't carrying -- if the cable operator was carrying A, B, C, and D, do you think that he or she might have a better idea of what programming was on those signals than on E?

A I don't know.

Q And do you think that at the end of this period, the cable operator would be likely to have a better idea of what programs were on E than before the station was carried on his system?

A He might.

Q Maybe?

A Perhaps.

Q Now, your premise which you read and I've quoted part of here says, you must measure what cable operators are "willing to pay for programs", correct?

I'm sorry, I'm just reading your quote and I'll go ahead and read it, by measuring "exactly what they chose to pay for them". Am I missing some words

in here? Whatever. Strike all of that.

The cable operator doesn't just pay for programs, isn't that right?

A That is correct.

Q A cable operator pays for signals.

A That's the premise of the study.

Q That's why you did your study, right.

A Precisely.

Q See how agreeable we can be?

Now, one way to observe what cable operators are willing to pay for programs by measuring exactly what they chose to pay for them, would be to take these signals carried during 1990, measure exactly how many hours of each program category were carried on each of them, multiply those amounts of programs by the amount paid for each of the signals, and just get a percentage. Wouldn't that be a direct way to measure what they paid for programs on those signals?

A Actually, no, that's wrong.

Q Explain why.

A Well, most obvious -- let's use your four -- let's suppose for the sake of argument, if I may, that the four percentages that you have there -- .893, .563, et cetera -- are, in fact, correct, and you pay

that amount for the first signal, and the second, and the third, and the fourth. So, we can just match them up to your A, B, C, D.

The point is that you pay 3.75 for each of them, assuming they are not -- may I? Allow me?

Q You assume --

A If you were to drop any of them, the cost of dropping them would be the same.

Q What you're saying is that you can't really ascribe a price?

A No, I'm saying you can't ascribe the .893 to a particular -- if I was carrying two distant signals as of a given date, one of which -- let's assume for the sake of argument, I was paying some amount for one and a higher amount if I carried a second. Identifying which is the "second" signal is not -- that's not a meaningful economic statement. I pay the marginal price for the carriage of a second signal, whether it's A or B. So, indeed, in fact, I'm paying it for both A and B.

Q In fact, you've put your finger right on one of the reasons the Tribunal has rejected exactly that approach in prior years, it was known as the "time plus fee-generated" approach.

A Well, I'm not sure I -- I don't have any

idea -- that may be right. I'm not endorsing that.

Q You're not endorsing what the Tribunal has rejected --

A I have no idea -- I don't know what the Tribunal -- all I know is, I've given you what I think is the correct economic analysis of the situation.

Q Right. You have a difficulty -- if you arrive at this situation here where there are, of course, stations carried, it's hard to figure out which is the first, without asking the cable operator or without going back to see when only A was carried, or --

A It's not even a meaningful statement.

Q Which is not?

A Which is the first, because they are all -- the point is -- again, just as a hypothetical -- assuming you had to pay those various amounts for one, two, three, and 3.75 for the fourth, you would, in fact, save 3.75 times whatever it is, by dropping any one of them.

Q I want to get to that, but let's stick with this point for a moment. If you knew the programs on these stations that were actually carried. You knew exactly how much money was paid for the total of them. You had some way that was acceptable, of dividing that

money up among stations, you could figure out what was paid for each category of programs, just by multiplying the hours times the dollars, right?

A I don't think that's a meaningful exercise.

Q And you did your study somewhat differently.

A Very differently.

Q And I want to get to that in just a moment. One other thing that we do know is that signal E was the last added signal, don't we?

A We know it was added.

Q We know it was added. There was a decision made to add it after decisions had already been made to carry A, B, C, and D.

A Correct.

Q And an appropriate assumption in economic analysis is declining return, or diminishing return. We know, we can assume based on economic analysis, that that signal E is worth less -- has lower value to the cable operator than signals A, B, C, or D.

A Yes.

Q Okay. So --

A I think I heard that somewhere before, actually.

Q Yes. See, we're being agreeable. I'm

going to add one further set of assumptions here, or numbers. One is that the royalty fee paid in the first period here, the second half of 1989, was $1,000 for these four signals, and the first half of 1990 it was $1100, and in the second half of 1990 it was $1,500.

Now, here's what you did on your study, and correct me if I'm wrong. First, instead of trying to measure what was paid for E, you took the difference between the total royalties paid by the cable operator in that half of the year and the total royalties paid by the cable operator in the preceding half of the year, is that right?

A Except that I did it in percentage terms.

Q And you expressed it in terms of a percentage increase.

A That is correct.

Q Okay. That's on the one side. And then, secondly -- I guess the overall premise is that you didn't consider these two cases at all, the '89-2 and the '90-1 case, you only considered -- you focused on the changed case, that is, the commencement of carriage of E for the first time in the second half of 1990, correct?

A That is correct.

Q And then when you collected your dollars information, instead of figuring out what E cost or what he paid for E, you calculated the percentage increase overall. And then instead of figuring out how many minutes of programs in each category were on E, you did the following -- and, again, correct me if I'm wrong. You took the difference between the programs in all of the categories on all of the stations in the second half of 1990, and you calculated the percentage increase in each of the categories compared with the percentages of programs on all the stations in the first half of 1990.

A Quite right. We took the percentage increase in Sports out -- let's take the case of the unweighted, which is easier to talk about. We took the percentage increase in Sports programs between '90-1 and '90-2, and the same thing for Local and Devotional and Movies and Series, we took the percentage increase in each, or the percentage change in each affected primarily by the introduction of E.

Q Exclusively.

A No.

Q In this case?

A In that case, assuming the other stations had the same programs on, that's exclusively, that's

correct.

Q Well, we're not talking about whether they had the same programs on or not, we're talking about the data that you used.

A Correct, absolutely.

Q In this case, you would actually take the programs added by E, and figure out what percentage change there was because A, B, C, and D all had the same programming throughout the year in 1990, based on the data that you used.

A I don't know that A, B, C, and D had the same programming throughout the year. From that arithmetic, we knew how much they had carried in '90-1 and how much they carried in '90-2, so there may have been some changes in program hours affected by station A changing its programs to some degree.

Q That's not how you explained your study in your --

A No, that isn't how we explained it.

Q So, you took the six months of Nielsen data available for station A, you divided it into the months that appeared in the first half of the year and the months that appeared in the second half of the year --

A Oh, I'm sorry. For '90-1 and '90-2, of

course, we only had data for the whole year, that's correct.

Q Of course.

A You're absolutely correct.

Q Then what you did after you had those two percentages and you did it for all the observations you identified, was to run them up for a regression analysis, throw them all into a computer, and they came out the other end, and you were able to statistically infer -- that's the way you characterize the conclusions -- the proportions of royalties paid for program categories on this percentage change basis.

A Correct.

Q So, even though the cable operator did not pay specific amounts for the different programs on E, you did all that work and then you statistically inferred what percentage of the royalty increase was attributable to each program type on that system?

A The only objection, I guess, to your characterization, is the -- you put it in one end of a computer and it came out the other --

Q Came out the same end, I guess.

A No, but there was some reason for doing it the way we did, some very good reasons.

Q I didn't mean to imply there wasn't, I know that.

A It's not a black box.

Q For me, it's a black box.

(Laughter.)

A For you, maybe it's a green box.

COMMISSIONER GOODMAN: It's a paper shredder for me.

(Laughter.)

MR. STEWART: It's more like an automatic teller machine that works in reverse.

(Laughter.)

And that's exactly where I want to come to, the meaning of your results.

BY MR. STEWART:

Q Now, I want to focus first on -- for reasons that may not surprise you -- on your unweighted results, because that's where you compare the number of hours of programs of different types unweighted by viewing, okay?

A Fine.

Q And in that analysis, as indicated on Table 1, you had a positive value of the coefficient you calculated for Movies and Series, and negative values for each of the other program categories you

considered, is that right?

A That's correct.

Q Now, tell me if this isn't a way to express that conclusion, those results. If a cable operator was faced with a choice between two distant signals, A and B, and A had 100 hours of Movies and Series programs on it, and B had precisely the same Movies and Series programs and, in addition to that, it had Sports, Devotional and Local programming. Those results lead us to conclude that a cable operator would pay more for signal A than for signal B just to be able to avoid getting Sports, Devotional and station-produced programming.

A If you accept that regression, which I indicated to you is one that we don't prefer.

Q That is correct.

A For statistical reasons, but that is, in fact, correct.

Q That is the meaning of your analysis.

A Correct.

Q Now, you make one stab at trying to explain this, which I found interesting. It's on page 24, Footnote 39. And there you say that perhaps the negative value -- we'll change this just so that we put Sports and Devotional on here so that it's 10

percent, so that station A and station B both have Movies, Series, Sports and Devotional, and station B now has extra programs which are station-produced programs, news and the like.

You say in Footnote 39 that, "the negative value of Local programming may result from the fact that 'channel surfers' must sort through them to find the programs they really wish to watch and, as a result, 'discount' the value of distant signals with large amounts of Local programming". Is that correct?

A It's a correct quote.

Q And that's based on pure speculation on your part. There's no evidence in your study of that phenomenon, is there?

A No. We simply try to understand or think about why that, in fact, might occur.

Q And it's really important, in fact, when you do regression analyses, first, to identify important variables, and then consider whether the results make sense, isn't that right?

A Well, yes. I'd like -- well, you can go on. I have an answer to give, but you'll probably ask the question anyhow.

Q Well, let's stick with channel surfing for a minute. Does that make any sense to you?

A Well, let's go back. Yes, the answer is it does make some sense so, if you'll sit down, I'll give you an answer.

Q I'll stand. I'm nervous.

A I'm glad you asked me that, so I'd like to explain why what you seem to think is an implausible result is --

Q I'm sorry -- I'm talking about your explanation for this.

A Oh, the explanation?

Q Yes.

A It seems to me a plausible explanation. There's a possible number of explanations, I suppose.

Q Well, first of all, you're talking about the channel surfers are not the cable operators, they are the cable subscribers, right?

A That is correct.

Q So, you're somehow positing that cable operators know about the pique of channel surfers in having to surf through these channels.

A No, that is not correct. They know something about which signals -- they must make a guess -- in order to decide which signals to carry, they must make a guess as to how which signals they carry will affect such things as the number of

subscribers, the rate they can charge subscribers, and the rest. They are, in effect, making decisions based on their assumptions about what their subscribers or potential subscribers may do if they add this distant signal or delete it.

Q That's all your speculation about what might have produced the results of --

A No, you asked me about operators. Operators, in fact, must make some assessment about what their potential subscribers must do. That's what I've assumed.

Q Okay. Now, let's look at what you assume or speculate that the subscribers do. Is it really your view that on, let's say, a 60-channel system, a channel surfer is only annoyed when he has to pass a station-produced program on a distant signal, and he's not annoyed -- in other words, he surfs one channel at a time and watches the next program, and it's only when he gets to the distant signal with a station-produced program on it that he passes it by to get to the next channel so he can watch that program.

A I think you didn't necessarily read or appreciate all the things that were said in the footnote. It said for signals that have large amounts of Local programming, we speculated that this might,

in fact, be the case, and that's important.

Q At any particular channel-surfing moment, there's only one station-produced program --

A Not relevant for the issue at present here.

Q Why is that?

A Well, I'll explain to you. It will take a minute, so you may want to sit down.

(Laughter.)

I should say I'm glad you asked me that. The first point to make, which is maybe not so obvious, is to ask -- you have this product that's a "bundle". The question is, well, why do we have some items on it that seem to have negative value? Why would anybody buy a product for which some of the components contain components of negative value.

And the short answer here is, well, what is of concern to the operator is the aggregate value of all the programs on that signal compared to the additional royalty payment he must make, and even if some of the signals had negative value -- I'll come back to that at the margin -- that, in fact, he might still decide to carry the signal, if the extra value of the valuable programs is enough greater than the royalty payment, and even if some of them had negative value, to go on doing so. He'll carry that signal.

Now, if this was an ordinary product -- sort of like my hypothetical car that I described before -- and there was a component with negative value, you'd expect the supplier of the program, or the supplier of the product, to say, well, this component has negatived value, I'm going to delete that program from -- I'll take it out because taking it out will increase the value of the product. And you wouldn't expect to find components with negative value in the ordinary sort of study of the sort I described before, for example, the car example, it would be very -- an odd anomalous to find negative values for some things that people are actually selling and including in products.

Well, why might that occur here? Well, of course, the person choosing the contents of the program isn't, in some sense, the person who sort of benefits by selling it directly to anybody, it's the originating broadcast station. They may a have perfectly good reason to show Local programs. They may be very valuable to local subscribers. The fact that they reduce the value to sales in distant markets is maybe of much less importance than the additional value that the station obtains by direct sales in its own market where Local programs are likely to be, or

might well be, highly valued, which leads me to the fourth point.

The contention is not that Local programs are worthless. That's not the assertion. The assertion, or the claim, is that at the margin -- that's why the footnote refers to a station with large amounts of Local programs. The programs may have value in the sense that cable subscribers occasionally watch them but, in fact, they may have negative value at the margins. Adding more of them beyond some point, in fact, reduces the value of that program to cable subscribers and, in turn, to cable operators. So, there's nothing economically implausible about observing a negative value for any of these, in this case.

Q You've now gone another level of speculation.

A It's not speculation at all.

Q It is, quite. You are now speculating about the motivation of the producer of the program to make it a certain way that would make it of negative value to a subscriber that would be reflected in cable operator decisions as to how much they'd pay for them.

A Not at all. I'm simply saying the choice of putting on a Local program by the station on which

it's carried is motivated by factors other than the likely revenues that it will fetch through the payments of distant signal subscribers.

Q But we're trying to understand what appear to be counterintuitive results if you say --

A No, I categorically deny that. There's nothing counterintuitive about getting a negative number here.

Q And your suggestion about why it's not counterintuitive is that channel surfers would be so annoyed to have, on that particular channel that they go past, to go past it, because they want to watch every other program that they passed, that that would somehow get translated into negative value with respect to what the cable operator decides to do.

A No. What I said was not counterintuitive observing a negative number. This was an attempt -- this is an attempt to try to understand why subscribers might, in fact, place negative values on them.

Q Wouldn't a more reasonable hypothesis be that even if the marginal value of the station-produced program on the next station that's added is zero, or is negative, if the value from the cable operator's perspective it would be zero? There's no

negative effect on taking extra programming and putting it on --

A Only to the extent that -- suppose you carried a signal that had lots of stuff that nobody wanted. For channel surfers, that would be a disadvantage. Often, when he turned to that station, would find stuff he really didn't want and he'd say, "Geez, I don't really like this".

Q You know, the MPAA's viewing studies show that there's some amount of viewing to station-produced programs on a distant signal basis. It's not "never" watched.

A And I gave you a perfectly good explanation for why that's so. There's nothing inconsistent between that observation and the observation that at the margin an additional Local program has negative value.

Q So, some non-trivial percentage of distant signal subscribers actually view these programs so, when they channel surf through, they stop and watch it.

A Correct.

Q And the other people who choose not to watch it, also choose, every time they watch a program, not to watch the other 60 offerings, isn't

that right?

A They may decide that they don't want to -- subscribing isn't worth all that much to them if, in fact, there's a lot of stuff on that they sort of waste their time looking through.

Q So, that's your explanation for the negative value.

A I don't want you to --

Q If a cable subscriber, every time he surfs through 60 channels, finds one to watch, and often it's on different channels, it's not on the same one or he wouldn't have to surf, that all the other programs that he doesn't choose to watch each time he surfs have negative value? That's the case, isn't it?

A I'm not sure I -- I couldn't follow the sentence.

Q Every time he looks at a channel and says, "I don't want to watch that", that has a negative value for him.

A He turns on -- he checks this channel and he finds stuff that -- often finds stuff he doesn't like.

Q Every time he finds something he doesn't like on every channel he doesn't watch.

A I'm sorry, the sentences are not holding

together for me.

Q Isn't a more reasonable hypothesis that if a cable operator's subscribers aren't interested in additional station-produced programs, the value of those programs would be zero, not negative, to the cable operator?

A I'm saying there is no inconsistency in getting negative value -- nothing inconsistent with economic theory to say that a value is negative.

Q From the cable subscriber's perspective, he's got 60 channels, and here comes the 61st, and it has programs he wants, and it has a few he doesn't, and he cancels his subscription, is that your hypothesis?

A He may be simply going to pay less overall for the subscription.

Q Because he has those extra programs that he doesn't particularly like.

A If they could be avoided at no cost, there would be no problem.

Q Now, you have rejected hypotheses before, even if they were statistically significant where the coefficient seemed wrong to you, isn't that right?

A Occasionally.

Q And you didn't do that in this case even

though you came up with negative coefficients for Sports, Devotional -- for everybody except your client, the first time you went around for the analysis?

A Say again.

Q You did not modify the analysis even though you came up with negative coefficients for programs of every claimant here except your client --

A We did modify the analysis.

Q You modified it so that you didn't have to defend that result.

A Not at all. The results are statistically superior when hours are weighted by viewing.

Q And you said emphatically that's significantly superior.

A Yes.

Q Would you turn to your Table 1 at the end of your testimony, and show me exactly where that is. And you've said in particular that there was a significant reduction in unexplained variance by --

A It's not in Table 1.

Q Well, let me say this. You said in your direct testimony that theory was a significant reduction in unexplained variance by adding the weighting. Could you point to that in Table 1 for me,

please?

A I don't believe it's in Table 1.

Q Well, isn't a measure of unexplained variance or explained variance, the adjusted R^2 figure that you have there?

A Well, let's go back and found out where it is.

Q You've got a footnote that has the test of statistical significance, but I wanted you to look --

A It's in Footnote 35.

Q And that says that it's statistically significant, the difference is statistically significant, right?

A Correct.

Q And now would you look at Table 1, please.

A (Complying.)

Q Your unweighted analysis -- and by the way, is that the first analysis that you ran, the unweighted hours regression analysis, first in time of the ones you've presented here?

A Yes.

Q So, when you first ran this analysis, your adjusted R^2 was .22, is that right?

A That's correct.

Q And that means that the hypothesis that you

made, the variables that you selected explained -- that is, the programming time variables -- explained 22 percent of the variation in royalty difference, is that right?

A Percent of changes in royalties, yes.

Q Then go to the top line there, that's your Preferred equation where you weighted it all by the viewing numbers provided by MPAA, and there your R^2 is what?

A .23.

Q So, now you've explained 23 percent as opposed to 22 percent, is that right?

A Yes. There's obviously some extra decimal places.

Q So, when you talked about a significant reduction, you were referring to the statistical significance of the difference between that 22 percent and that 23 percent?

A It isn't quite that, but a more precise statement of the test is in Footnote 34 or 35 -- 35.

Q That suggests that the difference between 22 and 23 is statistically significant.

A That's a very loose way to make the point.

Q Okay. Now, finally, on this, do the coefficients you've presented here and the shares that

you've urged on the Tribunal measured in 1990, or some other period?

A It's a figure for the entire period, but we did test to see whether, in fact, there were differences across periods, and we concluded there were no differences.

Q So, you're saying that, yes, those are the numbers for 1990.

A Correct.

Q Okay. Let's go back and see exactly how you did the study itself. If, as you suggested -- well, first of all, if you could assign the first station status to one of these A, B, C, and D carried in the first half of 1989, you'd be able to allocate some larger share of the $1,000 to that station and some lower shares to the others, right?

A I thought we agreed we couldn't do that.

Q I'm sorry -- if you could figure out which was the first, you could do that?

A I'm not sure what that statement means.

Q Moving right to the next -- let's assume we can't do that, all right?

A Assume we can't do that.

Q Right.

A Fine.

Q Then an appropriate way, assuming these are all 1 DSE stations -- and we'll get to the differences later -- but that $1,000 could be divided up so that it's a $250 per station royalty fee, okay? You might want to use your calculator on this because my math is suspect.

A I'm not sure what you just said.

Q If a total of $1,000 was paid for the four signals, and you have no basis for ascribing the first signal a higher rate, then a way to do it would be to divide up the royalties, $1,000 across all four signals, right?

A I'm not sure -- no, that's not -- I'm not sure -- I have a question. Are you assuming that you pay the same percentage of royalties for the first, second, third and fourth signal?

Q No, you pay a different percentage for the first --

A Then you cannot do what you just did either.

Q So, your -- well, you've told me I can't do the other either?

A Correct.

Q Okay. Well, I'm going to ask you to assume that $1,000 divided by 4 is $250, are you with me on

that?

A I think I'll go that far with you.

Q And $1100 divided by 4 is $275? Now, this one you might want to check me on. You are suggesting that this isn't right because one of these stations is worth more than the others?

A No, not at all.

Q Why?

A I'm suggesting because the cost of adding the fourth signal, whichever is considered the fourth since they're all, I guess, considered here for this hypothetical that they are the same except that they are added --

Q Some previous time.

A It's not a question of temporal. Each of those stations is the marginal station. If the system were to drop any one of them, it would save royalty payments based on whatever the payment is for "a" fourth signal, not "the" fourth signal.

Q Okay. So, another way to look at that -- I'm sorry, I can't do that math in my head but, say, the difference between the first DSE and second report DSE rates represent $200, that there would be some $200 fee paid for the first signal, but you can't tell which one that is, and that each of the others would

be worth a marginal price of $200 which you would save if you dropped it --

A I'm not sure what the first $200 is.

Q That's the premium for the first DSE. You've said you can't ascribe it --

A I'm not trying to be difficult, I'm just trying to follow what you're saying. This system paid $1,000 if it carried signals A, B, C, and D, correct?

Q Yes.

A You're not done. You've got another question to answer for me. Suppose it drops any one of them, what happens to its royalty payments.

Q Yes. If you're looking at the difference in this period here, it would save less than a quarter of the $1,000.

A Well, we're saying dollars. Tell me in dollars what it would save. Is it $200?

Q I can't.

A What?

Q I've assumed it's $200. My calculator is not good enough to do that.

A You tell me in your hypothetical how much you'd save if you drop a fourth signal.

Q $200.

A Fine.

Q Over here, you save $225. That is $200 as the premium for the first, okay? So that each of them is now worth -- I understand what you're saying -- as a potential signal to drop, $200 in the first instance and $225 in the second.

A If I were to drop any of them.

Q Yes.

A There's no reason to have written $225 four times, it's the same number for all of them.

Q There's a reason for doing it. Now, let's get to this period. You could follow the same analysis, and plot the terms of value of saying there's a $200 premium for the first and -- help me, help me -- $1300 divided by 5, of course, is $260. Okay. So, your same way of allocating the value, each one you drop would save you $260 until you got to the last one, and that would save you $460.

A I wouldn't use the word "allocate" but, yes, that's correct.

Q And that's an appropriate way of looking, from the cable operator's perspective, at the dollar amount attributable to each of the stations?

A It's the additional cost of carrying the extra signal.

Q Okay. Now, let's look at how you did your

study. When you looked at this changed observation, say, E was added. The difference between the royalties across those two years is $400. So, we attribute $400 change of total royalties, $400 to the change in programming represented by the addition of E.

A That's the cost to the system of adding that signal.

Q I'm not going to argue with you about what it is. That then would leave $1100 for each of these -- $275 for each of these, I guess --

A $225.

Q Right, I rewrote the number -- $225 for each of these. All right. That's the dollar part of your study.

Now, let's look at the programming part of your study. You used MPAA diary-based time and viewing numbers, correct?

A That's correct.

Q Would you get out Joint Sports Exhibit 6-X, if you still have a copy; otherwise, I'll provide you a copy.

A Yes.

Q I'd like to confirm with you and with counsel, if that's necessary, that this is the actual

data that you used in your study, because that's why it was sent to us and what it was represented to us as being. Is that right?

A That's correct.

Q And as we've discussed before, you would go to this data and find the 1990 viewing to A, B, C, D, and E, and then calculate the difference when you add to the others?

A It's actually a little more complicated than that. Basically, we have the hours, but use the viewing data to essentially rearrange the hours so as to reflect the viewing data.

Q Okay. But if E had been added here in the first half of 1990, you would have compared A, B, C, D, and E viewing in 1990 with A, B, C, D viewing in 1989, is that correct?

A Did you say A, B, C, D, E in 1990-1?

Q Yes, A, B, C, D, E in 1990-1 and A, B, C, D for 1989.

A Correct.

Q Now, your use of the MPAA viewing data constrained your analysis, didn't it?

A I'm not sure what you mean.

Q Well, you were required to select only certain signals for which you had MPAA's data, right?

A That is correct.

Q And I wanted to ask you to correct a statement made in your direct if it was incorrect. You say that you used every observation where you had data for the changed or added signal which, in my hypothetical, would be E --

A No, for all the signals.

Q That's right. You had to have programming data for A, B, C, D, and E in order to evaluate the effect of the addition of E, right?

A That's precisely correct.

Q And if you didn't happen to have D, even if you have, A, B, C and especially E, you had the programming data for the added station, you didn't analyze that situation at all.

A You needed the data for all of the stations. If I misspoke, thank you for correcting me.

Q Now, are you aware that the stations for which viewing data was available was not a randomly selected list of stations?

A I am.

Q Are you aware that not only was it not randomly selected, but stations were omitted from the list even though they met the criterion, based on judgments made by MPAA about the programming on those

stations, about whether MPAA would be interested in measuring the viewing of the particular programming on individual signals?

A I'm not aware of that.

Q Are you aware that not only was it not randomly selected, but as has been shown and, in fact, acknowledged by MPAA's rebuttal -- this is in 1989 -- it underrepresents certain kinds of stations with materially different -- I'll just say different -- programming patterns than the ones that are included in the study?

A I missed -- repeat that.

Q I'll start over. The list of stations actually underrepresents network affiliates and PBS stations as compared with the universe, in a way that actually affects the viewing results category-by-category.

A Let me say two things. I believe that Mr. Lane, in fact, informed of that fact, that you might actually raise this point.

Q Well, good.

A And I should say that that fact alone does not necessarily mean anything about -- necessarily have any effect on the results we obtained.

Q Because stations with materially different

viewing patterns are left out and others were --

A Because you have to understand the enterprise. The enterprise is to get at the value, incremental value, of programs. We're estimating a function, we're not computing averages.

Q And you think that it's not important to have a representation -- well, if you don't -- what you studied was every observation for which you had data, right?

A We wanted an array of different situations so we could, as you say, try to infer or determine the value, marginal value, of programs in various categories.

Q Infer the marginal value of programming in various categories on those 342?

A Correct.

Q Now, let's summarize the limitations here. By the way, when did Mr. Lane tell you that the list of stations had not been randomly selected?

A Sometime in the last few days.

Q Not before you did the study?

A That's correct.

Q This is a question I asked you before the lunch break. I want to try to get an idea of the comparison of the amount that you studied to the total

potentially relevant universe.

Now, on page 20 of your testimony, and 21, do you see that?

A I do.

Q You state that you began with 15,011 instances of carriage of particular stations by particular cable systems, do you see that?

A Correct.

Q And those 15,011 instances of carriage of distant signals were only on systems that changed in the particular accounting period in which the distant signals were carried?

A Any change during the period.

Q And the period you're referring to is six accounting periods, 1988 through 1990, right?

A That's correct.

Q So, if a system -- and there 1201 unique ones -- changed in any one of those six accounting periods, you counted all of the distant signals that carried across all six periods, and that came up to 15,011, right?

A I believe that's correct.

Q So, that number doesn't count the distant signals carried by systems that didn't happen to change carriage during those six accounting periods,

right?

A That's correct, I believe, yes.

Q I'm going to ask you to assume a few numbers for me here. One is that instead of 2500 cable systems, there were roughly 2,000 Form 3 cable systems on average during accounting periods across the period, but only an average of 2,000 Form 3 systems were carrying distant signals from 1988 through 1990. Are you with me so far?

A Fine.

Q And I use that number because I think Mr. Garrett's 2400 number was a number of unique Form 3 systems across that whole period, not the average number per period.

If there are 2,000 systems roughly, do you know how many distant signal carriage incidents to expect over that period of time?

A From that 2,000? No, not at all.

Q Would you look at your Table 4. You did a study of the average number of distant signals on your 342 observations and on other observations that didn't make it into the final analysis, do you see that?

A I do.

Q Will you accept for me as a gross approximation, that the average distant signals

carried by Form 3 cable systems was roughly 3, just as a conservative estimate? I can give you the Larson data, it's actually higher than 3. That would make how many incidents of distant carriage over the six accounting periods? We have 2,000 systems on average, and 3 distant signals on average --

A Times 6.

Q And you have six accounting periods that are covered. That's roughly 36,000 instances of distant signal carriage.

A That seems right.

Q Now, of that 36,000, about 15,011 were carried by the systems that also happened to have changes?

A Correct.

Q And that's something less than half. Now, of that 15,011, about -- you said that you came up with 1117 observations from 811 different cable systems in which there was a change during the period of analysis. I guess that's the number of signals that were changed by the systems --

A No, because it could be more than one.

Q But something over 1100, right?

A The number 1,000 is not comparable to the number 15,000.

Q I know, but if --

A No, by not comparable, I mean they are not measuring the same thing.

Q That's right. Each one might be because you substitute a signal --

A No, 15,000 -- no. If a cable system carried 3 distant signals, that's a 3 -- in one period -- that's a 36,000 -- that's a 3 in your 36,000. Our observations involved a number of instances in which there was a change. In each of those, the systems were carrying more than one signal. They're not in the same units, is what I'm saying.

Q Right. One thousand is the number of --

A Incidents. That's why you and I, during the break, pointed out that the use of the word "incident" is a bit ambiguous here.

Q Some of which incidents involved the dropping or adding of one signal, some of which involved the dropping or adding of more than one signal.

A No, the 15,011 include any instance in which a system carries a signal. So, if a system is carrying 3 or 4 signals, that counts as 4. If that now becomes an observation in which somebody added -- suppose they had gone from 3 to 4, that's not 4,

that's one observation, which itself contains several components which involved the particular distant signals which were being carried.

My point is that comparing the 1,000 to 15,000 is just not a meaningful comparison.

Q I want to make sure we're clear on this. We're going back to my attempted concrete example here of a Form 3 cable operator. In the second half of 1989, the cable operator made four purchase decisions.

A That's four of your 36,000.

Q Exactly. And in 1990-1 it made another four, and in 1990-2 it made five.

A Right, and the change from '90-1 to '90-2 is one change of the 1100.

Q Exactly. So that what you looked at, you ignored -- your 1100 number -- in the circumstance in which you ignored the '89 and '90 purchase decisions, you ignored all the continuing purchase decisions, in 1990 you considered the one added signal as a purchase decision, and that was an incident of observation.

A Ignored is wrong, of course, because we did, in fact, use those to calculate the percentage change in program hours from period-to-period. It's not fair to say that the other programs were ignored, they weren't ignored.

Q Well, we're going to get to that, but that's what I'm talking about. There were 1100 signals changed.

A If you're going to put 1,000 on that axis there, I'm going to object -- if I'm allowed to.

(Laughter.)

MR. GARRETT: I get to rule on that.

BY MR. STEWART:

Q If you consider that E, the decision to carry E one of 1100?

A It's not right to compare the 1,000 to the 15,000.

Q I'm trying to understand why. Wasn't that -- weren't your 1100 observations --

A Each of those 1100 observations contains more than one of those 15,000 because those 15,000 of incidents of actual carriage of a signal.

Q Right, and in my case it doesn't include more than one because there's only one --

A No, it does include all five.

Q Your 1100 includes all five?

A The 1100 doesn't include it, that's why they are not comparable.

Q Well, will you concede for me that in 1990-2 the cable operator made five purchase decisions?

A Yes, I will.

Q And one of those purchase decisions was the decision to add E?

A Correct.

Q And isn't that one purchase decision -- doesn't that one purchase decision to add E -- isn't it included in the 1117 number you put in your testimony --

A My objection to the formulation is that, in fact, the other four signals are, in fact, included -- information about them, in fact, is included in our observation, and I don't want you to have the impression that somehow they were ignored or discarded. In fact, they were an essential part of the analysis.

Q We can differ about that later, but am I wrong --

A There's no difference about it, I'm telling you what we did.

Q That may well be, but did you count your 1117 by counting E as one in this hypothetical?

A Exactly.

Q That's one of the 1117?

A That's precisely correct.

Q And we can argue about the significance of

what I'm about to do --

A No, I'm not going to argue about it, I think it's just wrong.

MR. STEWART: Maybe we ought to take a break now and let the Reporter recover a bit, if that's convenient for the Tribunal. I'm willing to go forward.

MR. LANE: I'd like to object to this, unless Mr. Stewart is going to bring on a witness during cross-examination -- during rebuttal phase. This is an exhibit, in my opinion, and the witness has specifically said that he disagrees with is and did not support it. And unless Mr. Stewart can bring a witness that will support it, based on what Dr. Besen did in his analysis I will object to it staying on the easel as an exhibit.

MR. STEWART: I'm not finished with this analysis. I am going to get to what I think --

MR. LANE: He may not be finished, but he's putting an exhibit on --

MR. STEWART: I'm not going to -- I'm going to be clear about what I think the meaning of this is, and talk to Dr. Besen about it. This 1117 number, I believe the witness has now said, means what I thought it did, which is that's 1117 of those adds, drops and

changes. That's where we are now.

He can object to what he thinks my implication -- the inference I draw from that may be, but I haven't gotten there yet.

MR. LANE: He has made an exhibit in which he puts a number down and states that that number is comparable to the other two numbers on the exhibit. The witness specifically denied that that is true, indicated that it was completely wrong to do that, and it is not supported.

CHAIRPERSON DAUB: Mr. Lane, would you object after Mr. Stewart finishes his line of questioning?

MR. LANE: I will object before he starts and after he finishes and while he's doing it.

(Laughter.)

MR. LANE: This is putting testimony of Mr. Stewart, first of all who cannot testify in this proceeding, on the board as if it's truth. It is not truth. The only witness who can state what the truth is about the analysis, has told Mr. Stewart that it is wrong. He cannot put a piece of evidentiary analysis based on specific numbers that the witness denies, unless you're going to have somebody who supports that.

MR. STEWART: It's no analysis. These numbers are from page 20 of his testimony. He says there are 15,011 of these, 1117 of those, and I'm trying to understand exactly what that is, and I've gotten him to explain at some length what they are. There's no analysis on here yet. And you all may be able to see where I'm going but, when I get there, maybe then we can --

MR. LANE: There is an analysis which the witness disputed, that the 35,000 and the 15,000 number are comparable to the 1100 number. He has said repeatedly that they are not. And they are written on the same table and proportionately put on the same table as if they are comparable, and they are not.

MR. GARRETT: Madam Chairman, could I ask that we go off the record, since I'm having difficulty paying for these transcripts.

CHAIRPERSON DAUB: Yes.

(Laughter.)

(Discussion off the record.)

CHAIRPERSON DAUB: The objection is overruled. Mr. Stewart, please continue your line of questioning.

BY MR. STEWART:

Q Would you feel better if I put 1117 on its

own page, Dr. Besen? This is the number of observations you originally considered for your analysis?

A Yes, depending on what else you put on, but it certainly would improve the chart.

Q The next number that I want to put on the chart, and you tell me if it belongs here or on a third chart, the 342.

A You can put 342.

Q I can put 342 on this chart?

A Yes.

Q So that out of 1117 decisions to add, drop or substitute signals that you originally identified, you analyzed 342, right?

A That is correct.

Q And the 342 was determined principally through the availability of data from MPAA on programming, is that right?

A That is correct.

Q You eliminated some others even though you had data, for other reasons which you describe in your testimony.

A Correct.

Q So, it's fair to say that you didn't consider at all roughly 21,000 purchase decisions made

by Form 3 systems during 1988 through 1990?

A If by purchase decision, you mean the carriage of a particular signal during this particular accounting period, that's correct.

Q Of the 1117 that were eligible, you actually analyzed 342.

A That is correct.

Q And you wouldn't agree to my calculation of a percentage involving these observations you analyzed with any of the other numbers, the 15,011 number --

A They are not comparable.

Q They are not comparable. Please explain to me why.

A Because the 36,000 were all of the instances in which a signal was carried, was carried by a system, and the 1117 involve all the ones involving changes.

Q So, your analysis is not intended to apply to anything -- I guess, to anything above the 1117, right?

A That's not correct.

Q Why not? You set about to analyze changes, and there were only 1117 of those.

A That is correct. The inference you draw from that is incorrect.

Q Okay. Why?

A You may recall, I described earlier why we chose to focus on the changes. We are trying to identify the marginal value of programs in various categories on the distant signals, and the best way to go about doing that, we concluded, was to look at instances in which there were changes in carriage of programs -- large changes in carriage of programs on distant signals. That does not mean that we did not intend to apply that to the carriage of all programs on distant signals.

This was simply a way to -- the best way -- to get an estimate of the marginal value of programs. Remember, that all programs are paid the value of the marginal program and, if you have information about the marginal program value, you have information about the marketplace value of all of the programs in a given category, a point that I've made before this Tribunal at least on one occasion, and probably more than that.

So, the fact that we have information on the marginal value -- that we used the information about the changes to determine the marginal value of programs, does not mean that those marginal values are inapplicable to the remaining observations.

Q Well, first of all, there are a whole bunch of systems and signal carriage decisions that weren't even considered, right? You started your analysis only by identifying systems that happened to have changes during the six accounting periods, correct?

A Correct.

Q And that wasn't randomly selected.

A We used every one we could get.

Q Then you were able to analyze only 342, and that was not randomly selected out of the --

A We used every one we could get.

Q So the answer is no, it was not randomly selected.

A Correct.

Q Now, it is necessary, is it not, in order to be able to project the results for my sample to a relevant universe, to have some sort of -- in a statistically responsible manner, to have selected the sample in some way that is a probability sample of some sort.

Q That is not correct.

Q You think that it's appropriate to use inferential statistics to project results of a doubly non-randomly selected system, is that right?

A What we did was use -- we're confusing two

things here. We're confusing the method by which the values are estimated, with the universe to which they apply. We estimated those marginal values in a way that makes the most sense. We had instances in which there were large changes in programming from which to determine the marginal value of programs, and then we applied that to the larger universe.

Q The larger universe meaning those representing these figures?

A That is correct.

Q You took these on the second page here, the 342, and you claim that they represent the value of all programs on the 36,000 distant signal carriages?

A We didn't do that, of course. We used the equation to determine the marginal value of programs.

Q Marginal value of programs on particular signals selected by MPAA on systems that have been (a) to carry only distant signals that were on the list selected by MPAA, and (b) made some change during those six accounting periods.

A Yes, but with respect to the first point, you have no reason to believe that the marginal values inferred from that collection of stations is, in fact, not representative.

Q No reason to believe it's not

representative. All right. One other question for clarification. If this system had an '89-1 -- this hypothetical system -- carried A, B, C, D, and X, and X had not been on MPAA's list, would you have analyzed the carriage of E over here?

A I'm sorry?

Q Was a condition of eligibility for the 342, that the system carry only stations for which you had programming data for all six accounting periods?

A I don't believe so, no.

Q So, it's just for the accounting periods that you wanted to analyze.

A Correct.

Q Now, in effect -- back to this last chart showing the 342 -- your R^2 statistics suggest that you explained roughly 23 percent of the variance.

A There you go again. I don't want to make this sound offensive, but it's important to label -- it's important that the axes, in fact, have some meaning. I mean, we've had three different -- the third set of axes without any label on them creates confusion.

Q Would you answer my question.

A The shaded area is what confuses me.

Q That your R^2 for your Preferred analysis

suggest that you've explained 23 percent of the variants in the increase -- or the changes in royalties by the category changes that you've --

A Correct.

Q Let's look now at the other data that you used, and I'm going to give you a document labeled NAB 1990 Exhibit 43-X, and let me first represent to you what this is and ask you to confirm that that's what it is.

(Whereupon, the document was marked for identification as Exh. No. NAB 43-X)

You have provided me a diskette on Tuesday of this week that included the distant signal carriage data for all of the systems covered in the 1117, I believe, or something like that -- a database that showed carriage statistics for a large number of systems, is that right?

A That's correct.

Q And what I did with that diskette and what this represents is to select out of that database the systems that I believed were included --

A I'm not certain that it's the 1117.

Q That's not relevant at this point. What I

did was to select what I thought were the 342 that made it into your analysis in the end, and I've given you the first five or six pages of a printout that presents that data.

Now, based on that description of what I did with the diskette that you provided me, could you confirm for me that this is the carriage data that was used in your analysis, as a part of your analysis?

A It has the same format. I obviously don't remember each of the observations.

Q Next is a document I'm going to ask you to label 44-X.

(Whereupon, the document was marked for identification as Exh. No. NAB 44-X)

I'm providing you with a printout of another diskette you provided me last week -- I'm sorry, this was provided this week because it includes the change period which you recall we discussed, and the only thing I did was just to move the Devotional column from the far left to the far right. I don't know why it came out, when I printed it out, that way, but this is the entire contents of the diskette you provided us, presenting the data that's represented

here.

Let me ask you, Dr. Besen, to confirm that this is the data that you provided me?

A It seems to be in the same format.

Q And, second, to ask you to tell us what is in this.

A This one, I believe, is the actual variable values in the Preferred regression, but I'm not certain about that.

Q Well, let's go through column-by-column. The first column is Change, and that's the period in which there was a change that you analyzed.

A Correct.

Q Second is Sys ID, which is an identifier for each of the systems?

A It was one of the ones that CDC used as an identifier.

Q And the first two letters are a state code, and the remainder are an identifier of the cable system.

A I believe that's correct.

Q And the third column is the name of the owner of the cable system?

A Correct.

Q The next column is labeled DeltRoyl, can

you explain what that is?

A I believe it's the percent change in royalties, but I'm not certain.

Q You're not certain?

A I believe it is, yes.

Q And what are the remaining columns?

A There's a percent change in hours weighted by viewing.

Q So that for the first entry here, this Exhibit 44-X presents the information that in the first half of 1990, this cable system owned by Cable South, Inc. made a change that resulted in a reduction in its royalties and a percentage reduction in the weighted hours of programs in each of the categories you've listed here?

A Appears to be the case, yes.

Q Can you help me, is the minus 0.55 a 55 percent reduction?

A I'm not certain.

Q You're not certain? Didn't you prepare this?

A It was prepared at my direction. It makes no difference where the decimal point is, as long as they are done consistently.

Q Well, it does make a difference to me

because I'm trying to understand this. Can you ascertain --

A I believe they are 55 percent.

Q So, the first one is a 55 percent reduction in --

A I believe so, yes.

Q And the next line below that, that's a 453 percent increase in royalties?

A That's correct.

Q And moving to the next column in the first line, that's a 56 percent reduction in the viewing weighted Local time?

A That's correct.

Q Now, why are Series and Movies broken out separately here?

A I'm not certain.

Q Can you ascertain why they're broken out?

A I can, but not at this moment.

Q Pardon?

A I'd have to check with the person who compiled the database.

Q Is he in the room?

A The person in the room may or may not know the answer to the question.

Q Can we find that out before we proceed?

VOICE: I have no idea.

BY MR. STEWART:

Q The answer from your friend in the back of the room is, he has no idea either.

A No, this is -- he has no idea. He does not know. We'd have to check with the computer person that did this.

Q But it's your testimony that you did not run a separate analysis for Series?

A That is correct.

Q Now, I haven't provided you a printout of the diskette you provided me on royalties themselves, but you did provide me such a diskette, is that correct?

A I believe so, yes.

Q And along with that data showing the royalties, the programming data in Joint Sports Exhibit 6-X, the carriage data in NAB Exhibit 43-X, and the royalty data which I haven't made an exhibit out of, were all that was used to produce the calculated numbers in Exhibit 44-X, is that correct?

A That's correct.

Q And then you took the calculated numbers in Exhibit 44-X and performed multiple regression on them?

A Correct.

Q Which is not a crime in this state, I don't believe.

(Laughter.)

COMMISSIONER GOODMAN: This is not a state.

MR. STEWART: Maybe it is a crime.

(Laughter.)

BY MR. STEWART:

Q Now, let's go through some of these specific examples so we can get an idea of what happened here. If you look at 43-X -- and let me label them for you.

CHAIRPERSON DAUB: Mr. Stewart, right after this line of questions, let's give our Reporter a break.

MR. STEWART: This would be an appropriate time to take a break.

CHAIRPERSON DAUB: We will take a five-minute break.

(Whereupon, a short recess was taken.)

CHAIRPERSON DAUB: Back on the record. Mr. Stewart, please continue.

BY MR. STEWART:

Q Dr. Besen, I'd like to use these exhibits I've just given you, to take a look at a few specific

examples, and you'll be happy to know that I've eliminated a bunch during the break. We're also going to be looking at examples from the first two pages because, given the amount of time I've had to review this, that's as far as I've gotten.

Let's look at Exhibit 43-X which is the one that shows the carriage, and 44-X which is the one that shows the calculations, and the first system I want to look at is the one with the identifier CAA720, it's at the bottom of the first page of 43-X, do you see that? -- the system with the identifier CAA720.

A Yes.

Q And it also appears on Exhibit 44-X as the fourth line, CAA720 King Videocable Company, do you see that?

A Yes, I do.

Q This is the first example, looking at 44-X, of a positive delta royalty figure that is an increase in royalties and negative factors for all of the program categories, do you see that?

A Yes.

Q That reflects the fact that there was a reduction in programs on all categories, and an increase in royalties, right?

A Correct.

Q Now, let's look at 43-X and just walk through this step-by-step the first time. In 43-X, you've organized station-by-station -- that is, any station that was carried by that cable system across these accounting periods is listed in a separate line, correct?

A This is CDC's format, I believe.

Q This is the format you provided me.

A Correct.

Q And this carriage data actually covers 1987 through 1991, as indicated by those numbers at the top of the columns. Do you see those?

A I'm sorry -- back to 43-X?

Q Yes, and if you look across the very top --

A Correct.

Q -- there's '87-1, '87-2, '88-1, '88-2, do you see that?

A Correct.

Q Each of those columns, if you then read down, represents what station carriage there was on that system for the accounting period that's identified at the top of the column, correct?

A Correct.

Q And the ways that the stations are identified are either "L" which means, what?

A Local.

Q Or "D" which is distant?

A Correct.

Q Or an "asterisk" which means it wasn't carried during that period?

A Correct.

Q And also, before we look specifically at CAA720, the "ST" and "ST1" columns that immediately precede the accounting period columns identify the type of station that it is, is that right?

A That's correct.

Q So, an "N" is a network affiliate, is that right?

A An "N" in the first of the two columns, and the second is NBC.

Q And "F" in the second column means the Fox affiliate?

A I guess so, yes.

Q And "E" in the first column means what?

A Educational.

Q Let's look at CAA720, and you can tell which period you looked at in one of two ways. One is to read across all the Ls and Ds and find the first change, and the other is to look back on Exhibit 44-X and see in the Change column '89-2, is that right?

A Correct.

Q So, if you look down the '89-2 column for CAA720, we see that it carried a Local signal, Local signal, it dropped KICU in the second half of '89, correct?

A That is correct.

Q It carried the next three stations, and it added KSCH, correct?

A Yes.

Q And it dropped KTVU, correct?

A Correct.

Q So, it dropped two stations and added one, and the two stations it dropped, by the way, were independent stations?

A Yes.

Q And the one it added was an independent station, right?

A Yes.

Q So, under that scenario, wouldn't you expect the royalties to go down, not up?

A You might.

Q You might?

A All I know is what actually happened to the royalties.

Q If you look at your cable operator over

here who is looking to add a station in the next accounting period, isn't your presumption that that cable operator's going to anticipate additional royalties if he adds a station and reduced royalties if he drops a station?

A That's correct.

Q Rather than going through the process of trying to guess why that was, let me hand you exhibits that I have had marked 45-X and 46-X, which are Statements of Account filed with the Copyright Office for that system, for 1989.

(Whereupon, the document was marked for identification as Exh. No. NAB 45-X and 46-X)

If you would look at Exhibit 45-X and turn to the third page of it, you see there a list of stations that the system carried.

A Correct.

Q None of them are identified as distant or local, correct?

A That's correct.

Q That's because this system was a Form 2 system, which you can tell by looking at the front page of the exhibit. It's a short for statement of

account.

A Correct.

Q And that's true for both periods of 1989 for this system.

A Right.

Q I think if you look at the carriage list, in the second half, you'll see the same adds and drops that are indicated in the database you used, if you compare those two lists of stations.

A Yes.

Q And, furthermore, you will see that between the first --

A I don't have time to compare them. I'll take your word that they represent the changes.

Q That's fine. And if you look at these statements of account, you would find that, indeed, there was an increase in royalties between the first half and the second half of 1989, paid by the cable system.

A Yes.

Q Now, do you know the difference between a Form 2 system and a Form 3 system in terms of how it pays for distant signals?

A In general terms, yes.

Q What is that difference?

A I believe a Form 3 pays on the basis of its actual signals carried. The other, I believe, is based on some formula based on revenue.

Q So, it doesn't matter how many distant signals the Form 2 system carries, it pays the same rate, isn't that right?

A That's my understanding.

Q There's no additional DSE charge when it adds a signal, and it doesn't save a DSE charge when it drops a signal.

A That's my understanding.

Q So, in this circumstance, even though the cable operator, in the first half of 1989, knew that no matter how many signals he carried on a distant basis, he paid the same percentage of his gross receipts, made decisions about dropping two and adding one, is that right?

A That's correct.

Q And so he didn't have the same kind of calculus facing him that a Form 3 cable operator had in making a decision to add a station.

A Apparently not.

Q Let's look next at system CAA810 --

CHAIRPERSON DAUB: Mr. Stewart, before you continue -- Dr. Besen, refresh my memory -- your study

of these stations included mixed Form 2 and Form 3?

THE WITNESS: It was supposed to be all Form 3 systems.

CHAIRPERSON DAUB: Thank you.

THE WITNESS: That was the database supplied to us by Mr. Larson.

CHAIRPERSON DAUB: Please proceed.

BY MR. STEWART:

Q Let's look next at system CAA810, which is on the second page of Exhibit 43-X, it's the second system down.

A I have it.

Q Now, first -- and I'm sorry I didn't repeat the column headings, but if you will go over to the fourth column from the left is the second half of 1988 --

A I'm not sure how far left I have to go.

Q To the first "D", the first column, that's 1987-1. The next is the second half of '87, next '88, next second half of '88 --

A Why don't I just mark them.

Q I did that on my copy, and I'm sorry I didn't --

A How far do we want to go?

Q Fourth column.

A Counting from there.

Q Fourth column of distant carriage information.

A Good.

Q In that one, KCAL is a distant signal, KCET has been added as a distant signal for the first time, correct?

A Correct.

Q And there are two local signals, and then KQED is dropped as a distant signal.

A Um-hmm.

Q There's a local signal, and then KTLA and KTVU as distant signals. The next one wasn't carried, and the next one is WTBS as a distant signal, do you see that?

A I see it.

Q So, that was a situation in which, as compared with the first half of 1988, there were two changes, in effect, KCET substituted for KQED as a distant signal, correct.

A Yes.

Q But you didn't consider that a change, did you?

A Because it was educational, no.

Q Now, your reason for not including

educational was what?

A We did not have program data for the entire sample period for educational stations. In fact, there were a number of periods for which there were no program data.

Q And that's true for 1988 for KCET?

A Well, we generally wanted to estimate a single equation for the entire period, so if there was no educational program data for all the periods, we simply decided, determined not to analyzed educational programming.

Q I thought you told me otherwise. Did you apply a different rule for commercial stations? That is, if any distant signal during the entire six accounting periods, was not a Nielsen listed station?

A We did not include any educational, that's right.

Q You applied a different rule for educational than for commercial stations?

A No, I believe that's the case. I'm sorry -- yes, it is the case.

Q And if you skip over four more columns so you are now at the third from the right, you see that there is a -- again, KCET is added?

A Correct.

Q And you did have programming and viewing data for KCET for 1990 and 1989, correct?

A I'm not certain. I know we did not have it for several -- at least one of the years, and perhaps more.

Q It's on your programming exhibit for 1989 that MPAA supplied you, and I can represent to you that it's included in the 1990 viewing study presented by MPAA to the Tribunal here.

A All I'm saying is, in fact, we did not use educational stations at all. You are correct, it's a different rule used.

Q So, staying in that column, that's the third one from the right there, which is the second half of 1990, you had a situation where KTVU was dropped and KCET was added, and you analyzed only changes resulting from KTVU's being dropped, is that right?

A I'm sorry -- KCET --

Q KCET was added.

A And which was dropped? I'm sorry, I'm having trouble following you.

Q KTVU.

A That is correct.

Q But in analyzing programming changes on one

side and royalty changes on the other side, you did not reflect the fact that there was a new distant signal added, KCET.

A The educational one, correct. We never took account of educational stations.

Q Even though you had data to do so in this case.

A The reason for that is that, in fact, we wanted to estimate the same equation across all periods, and you couldn't simply pick and choose to include it some of the time and not in others.

Q But you did that for commercial stations, or you're missing data for one of the distant signals --

A No. Remember, we tried to estimate coefficients for the educational stations. It's not quite comparable.

Q In any case, you didn't consider them at all, even when they were coupled with changes in commercial stations.

A We couldn't, given the approach we were taking, that's correct.

Q Next, let's look at CAB310, which is at the bottom of the second page of Exhibit 43-X. If you look at the KMEX line in there, and just go over to

the first asterisk. That's the period that you analyzed as part of your study?

A I can't that --

Q It's just the first --

A I can '89 --

Q Well, you've confirmed that it is the period --

A Well, I thought this other one says that '89-1 is the first. I may have miscounted. You're correct, it is '89-1.

Q Okay. Now, looking back at 44-X, here we have a situation where the change in royalties was negative, a 19 percent drop in royalties, correct?

A Correct.

Q And changes in all of the other program categories are negative, except for what you call Local.

A Not what we call Local, what are Local.

Q No, they are not Local, they are station-produced programs.

A I'm sorry. Yes.

Q Now, how could that be? We have here no change in distant signals except that a station is dropped. Why do you show an increase in station-produced programs?

A I'm sorry? Are you saying there's an error in the database?

Q I'm asking you to explain how it is that your study shows that when you drop a signal --

A Oh. Because there could have been an increase in Local programs on other signals.

Q Right. So that here you have a situation where, in the first half of a year, you drop a station which would lead you to believe that you're going to have less programming in all categories, but the way you've compared it you looked at the viewing available in 1990 on these remaining stations, and compared -- I'm sorry -- the viewing weighted time available for those same stations in 1989, right?

A That's correct.

Q So that if it were carefully measured, you would suggest that there was an increase in Local programming, what you've called Local programming on A, B, and C, so that even though D was dropped and with it went some station-produced programs, overall, the amount of station-produced programming increased?

A Apparently that occurred, yes.

Q Well, let's see if that occurred. What data did you use for 1989?

A It would have been for the stations that

were on in '89-2.

Q Well, you used data for the entire year, is that right?

A Correct.

Q Of 1989?

A Correct.

Q You didn't look to see whether there was a difference between the first and second half of 1989 in those programs?

A I don't believe there were separate data to do that.

Q There is separate data to do it, but you didn't separate it out, correct?

A I'm not certain.

Q And, similarly, if you used full-year data, or which you are not certain at this point, you would have measured the station-produced programs on these signals as reported by MPAA's viewing study throughout 1990. You compare all of 1990 to all of 1989, you conclude that there's a change over that accounting period?

A Correct.

Q So, the fact that as you measured it, the station-produced programs on A, B, and C went up, despite the fact that you dropped a station. Is the

station-produced program category a negative correlation?

A They are negative in that observation, correct.

Q And if you sum enough of those, it is that kind of observation that produces a negative correlation in the final coefficient --

A I don't believe that's the case at all, and there's no reason to draw that inference. There are lots of observations here. One cannot selectively pick out an observation and say that is the reason for the results.

Q It's part of your data, isn't it?

A It's part of the data.

Q and the way you handled this particular situation was that even though a station was dropped, it showed an increase in the viewing.

A Those were the way the variables were defined, correct.

Q Now, next, if you turn to just the top of the next page of Exhibit 43-X, you'll see the continuation of CAB310. And there aren't anymore changes in that period, that's the first half of '89 --

A I've lost track of which column it is.

Q Fifth column over from the left.

A Okay. You say there are no changes in the fifth period?

Q No more changes in distant signals in the fifth period.

A Oh, yes.

Q But there is a change, isn't there? The addition of XEWT, Tijuana, Mexico, as a Local station. Did you consider that in your analysis?

A No.

Q Would the dropping of one Spanish language station and the addition of another Spanish language station suggest that you ought to consider both of those events if you are trying to calculate the impact on royalties or on market value of changes in programming on that system?

A Well, remember, we are trying to get the value of programs on the distant signals.

Q So, you ignored all Local programming, correct?

A That's correct.

Q And if you look at some of these systems back on the first page of 43-X, they are just jam-packed with Local systems and they've got relatively few distant signals, right?

A Which page are we on?

Q The front page of 43-X, that Arkansas system, ARR300, they've got lots of Local stations and one or two distant stations, right?

A Correct.

Q When you did your analysis to decide how much change in programming of different types there was, you only compared the one distant signal that was added with the other distant signal that was already carried --

A That is correct.

Q And there are Syndicated Series and Movies on Local stations, aren't there?

A Correct.

Q And the marginal change in Syndicated Series and Movies on that system is very different if you look at it based on how much Syndicated Series and Movies you had across all the broadcast stations you carried versus just the distant signals, correct?

A I'm sorry, I missed the question.

Q Lots of Syndicated Series and Movies already on the system.

A Correct.

Q If all you measure is the difference in distant signal Syndicated Series and Movies, you come

up with a very different result.

A It would depend on whether, in fact, the changes in Local signals were, in fact, correlated with changes in the distant signals.

Q Changes in Local signals?

A Correct.

Q Now, let me make sure we get this straight here because you compare -- just looking only at distant signals, you compare the change across all the distant signals, even those that you continue to carry, correct?

A Correct.

Q You're not suggesting that we have to apply different rules to Local signals?

A We're trying to get the value of the distant signals.

Q If you're trying to figure out the marginal difference in the amount of Syndicated Series and Movies carried on that system, don't you get a very different number? It doesn't depend on the changes in Local signals, does it?

A I'm sorry, I missed the antecedent of "it".

Q If you had 1,000 hours of Syndicated Series and Movies on Local signals, and it made no change in Local signal carriage, those 1,000 hours kept plugging

away. You had two distant signals and the first one had 50 hours, and you continued to carry that. The one that you added had another 50 hours. That would be, in your view, 100 percent increase in the Syndicated Series and Movies, correct?

A On distant signals.

Q But from the perspective of the cable operator, assessing marginal value of Syndicated Series and Movies, don't you think -- I'm not going to ask you whether it was relevant -- you'd get a different result if you considered his 1,000 hours that he already has, wouldn't you?

A I'm not sure I know the difference of if I considered them.

Q Well, if you measured the change on the base of all Syndicated Series and Movies available on all stations carried by the system as opposed to just the distant signals, you'd get a very different result, would you not?

A The value of the variable would differ. If you did this, the coefficients would differ.

Q Do you believe in the maxim "garbage in-garbage out"?

A I'm sorry?

Q Do you think that the accuracy of your data

-- having accurate data is important to having reliable results of a study such as this one?

A Yes, I do.

Q Do you know whether the viewing data and time data that you've used in your analysis is accurate?

A We did not independently verify the data other than to, as I said before, to correct obvious inconsistencies and to blow up the numbers where they were available only for four or five months.

Q Is this printout that we're looking at before or after you corrected those errors?

A I believe it's got the corrections.

Q I'm going to hand you -- I'd like you to look at JSC Exhibit 6-X, and find on the front page of that KCNC for 1990 -- that's observation number 20, do you see that?

A I have it.

Q And read over to the Sports column. Do you see 0.0 for the time there?

A I do.

Q I'm going to hand you a copy of Exhibit MEK-8, which is the diary-based viewing study that's been presented for 1990 here, and this is the last page of it which summarizes results, and ask you to

look at the Major Sports column and see whether there's any time and viewing for Sports programs in that printout?

A There's 24 quarterhours.

Q And how much viewing?

A Viewing hours, 66,000.

Q That does not appear in Exhibit 6-X, which is the data that you used, correct? -- that is, any Sports programming minutes during 1990?

A I don't -- if this number is supposed to be the same as this number, they are obviously not the same numbers.

Q I believe we have established that MPAA diary-based viewing study's time and viewing numbers are what was supposed to have been used in the regression analysis.

A They were used.

Q In that instance then, the numbers that you used are different from the numbers that have been presented to the Tribunal, right?

A They were the numbers supplied to us by the MPAA.

Q That's fine, but you've confirmed that they are different as between those two --

A If that number -- obviously, I don't know

the source of the numbers you've just placed before me.

Q Are you aware of program classification errors made by MPAA in prior years' proceedings, in viewing studies it's presented to the Tribunal?

A No, I'm not.

Q Let me suggest to you that the Tribunal's decisions will reveal that MPAA categorized a number of station-produced programs as Syndicated Series in the initial version of its viewing study, in particular on the superstations, and those misclassifications were corrected during the course of the hearing and the corrections were accepted by the Tribunal.

Do you know whether the data you've used are the corrected data in terms of those program misclassifications?

A I do not know.

Q Finally, I'm going to hand you something that has been numbered twice, actually -- go with the second number, 47-X, and I will represent to you that this is a page copied from the printout of the final results of the six-cycle viewing study presented by MPAA in the 1989 proceeding.

(Whereupon, the document

was marked for identification as Exh. No. NAB 47-X)

I'd like you to turn to page 10 of JSC Exhibit 6-X and, at the very bottom of that page is a line number, 290?

A I have it.

Q And if you see by reference to the top half of the page, that's viewing data for WPIX for 1989, do you see that?

A Yes.

Q Now, the first column is viewing to Movies, and it shows 294,769 on JSC Exhibit 6-X, do you see that?

A Yes.

Q Can you find the comparable viewing number, it's called Total HH Viewing Hours for Movies on Exhibit 47-X?

A It says 36 million-odd-something.

Q If you go over two columns to Sports, you'll find a similar discrepancy, and there is a 36 million number on the data that you used and back on the actual study it shows 5 million, and Devotional programs are 63 million in the data that you used and are 294,000 on the MPAA viewing study, do you see

that?

A Yes.

Q Now, if I were to represent to you that of your 340-some observations, roughly 20 of them involved adds or drops of WPIX in which 1989 viewing data would have been used, does that sort of garbled data suggest to you that there might be a problem with the final results of this?

A It might create a problem, yes.

Q Are you aware of any other errors in the data that was used?

A No.

MR. STEWART: Thank you, I have no further questions.

CHAIRPERSON DAUB: Thank you, Mr. Stewart.

Mr. Hester?

COMMISSIONER GOODMAN: Could I ask a question while he's doing that?

CHAIRPERSON DAUB: Sure, go ahead.

COMMISSIONER GOODMAN: I don't understand -- Dr. Besen, I'll ask you this about your exhibit, or maybe, Mr. Stewart, I'll ask you a question.

On 43-X, under the first station column, I take it that's either the network or educational or independent. The second one, ST1, what is that? I

think somebody said -- Mr. Stewart, I think you said it -- that "N" would mean NBC, for example. What does "S" mean?

MR. STEWART: Spanish or Specialty. That's for an independent station.

COMMISSIONER GOODMAN: I think it was on a Tijuana station in California, I think CAB310, which is on page 3, why wouldn't that have an "S"?

MR. STEWART: I think Cable Data Corporation doesn't provide that the same initial.

COMMISSIONER GOODMAN: Why wouldn't KVEA under CAC770, on page 4 -- that's another Spanish station -- or is that just not sufficiently important and that just got dropped off of those attributions?

MR. STEWART: This is not my database, it's a printout of the data that was provided to me by Dr. Besen, which I take it was provided to him by Cable Data Corporation, so I don't know the answer to that.

COMMISSIONER GOODMAN: I'm not sure it's totally relevant, I'm just trying to understand the column, and I suddenly noticed that the letter wasn't there.

MR. LANE: The specialty stations are designated by the Copyright Office through regulation, and what is a specialty station -- at one point

specialty stations were defined by a 1972 FCC decision, and they pretty much bore no relationship to reality. I don't know whether this is a new station, or it just didn't make it to the specialty station list. The list is updated every three years by the Copyright Office, by regulation. So, whether that's the reason here, but that could be an explanation. It may, in fact, be a specialty station, as we all know, but it just never made it into the regulations.

CHAIRPERSON DAUB: Maybe it was below 50 percent of the program --

MR. LANE: There could be a lot of reasons.

COMMISSIONER GOODMAN: It's now a Spanish station, but maybe it wasn't three years ago or whenever it was.

MR. LANE: That could easily be --

COMMISSIONER GOODMAN: What does "P" mean, do you know?

MR. STEWART: I believe that's a low-power station.

COMMISSIONER GOODMAN: The unrelated study that you ran, I think you said that was the first one you ran?

THE WITNESS: It was the first of the ones -- the question I was asked, was it the first of the

ones that appear on this chart.

COMMISSIONER GOODMAN: Okay. That's an analysis that you aren't endorsing, or how would you phrase that?

THE WITNESS: That's correct.

COMMISSIONER GOODMAN: Why not?

THE WITNESS: Because the equation with weighting by viewing, in fact, is statistically superior to this one. One can conduct -- as Footnote 35 reports the result of the statistical comparing the weighted regression -- we call that the Preferred equation -- and concludes that, in fact, using the weights results in a significant reduction in unexplained variance and, therefore, we prefer the equation as weighted by viewing.

COMMISSIONER GOODMAN: Why did you include it then on the tables?

THE WITNESS: Why do we include it? I suspect -- somebody might have suspected that, in fact, the results were an artifact of the weighted. And so in anticipation that someone might ask us what would happen if the equations were unweighted, the variables were unweighted, we reported it.

COMMISSIONER GOODMAN: I understand. Let me go back to negative value. I was trying to

understand that. Your analysis is essentially a statistical analysis, is that right?

THE WITNESS: That's correct.

COMMISSIONER GOODMAN: Your statement that -- in which you explain why there might be a negative value to Local programming, is that speculative? Is that hypothetical? How would you phrase that?

THE WITNESS: The question I was answering at the time was, is it plausible that, in fact, a coefficient for one of these shares could be negative. And what I suggested by my answer was that if this were an ordinary commodity sold in an ordinary market, one, in fact, would regard a result of a negative coefficient as implausible. There is less reason to believe it's implausible here because of the nature of the way the products are constructed and because of the nature of the market in which they are exchanged. If this were a true market, in fact, there would be no -- as opposed to a compulsory license, one would not observe negative values. That would, in fact, be inconsistent economic rationality.

What I was trying to suggest in my somewhat extended answer to Mr. Stewart was that, in fact, as a matter of economic logic, given the nature of this market, one cannot rule these out on the ground simply

that they are implausible.

COMMISSIONER GOODMAN: I think my last question is of you, Mr. Stewart, and I may have missed it. I heard you state to the witness that "what you've just said is time plus fee-generation", which the Tribunal has thrown out. Was that in response to a comment he made, or to a study? What was that in response to?

MR. STEWART: I thought that what I said was that "you've just identified a principal reason why the Tribunal has thrown out time plus fee-generation, which is that if you have those four signals, it's hard to say that one is worth more than the other. We don't know how to allocate the total price paid among those four stations, and that's a problem with ascribing any price to each of the four stations and then just multiplying it through. That is one of the reasons that the Tribunal has cited in rejecting time plus fee-generated in the past, and that was something that Dr. Besen articulated.

COMMISSIONER GOODMAN: Is that --

THE WITNESS: I don't know the history of the dispute. All I was answering was the specific question about Mr. Stewart's hypothetical, and I think, in response, he simply said yes, and the

analysis I had done was consistent with past Tribunal decisions. I suppose that's an interpretation.

MR. STEWART: I think the transcript will speak for itself. I wasn't under oath either.

COMMISSIONER GOODMAN: Those are all my questions. Thank you.

CHAIRPERSON DAUB: Mr. Hester?

MR. HESTER: Good afternoon, Dr. Besen. My name is Tim Hester, I represent PBS.

CROSS-EXAMINATION

BY MR. HESTER:

Q Let me ask you at the outset whether you prepared any other specifications of this model that you have developed, that are not reflected in the tables at the end of your testimony?

A Yes.

Q Could you describe some of those specifications that you recall, please?

A Yes. There's basically two -- well, really, only one. At the outset of our analysis, we considered equations in which the dependent variable was the change in Basic subscriber revenues, in addition to considering changes in royalties, both obviously in percentage changes. And that was an analysis that we carried out for a while before we

realized that, in fact, that was theoretically incorrect to do. It was both -- well, when we realized it was theoretically incorrect, we abandoned that particular line of analysis.

Q What was the reason you began with that line of analysis? Did you see revenues as a way to look at the value to cable operators of distant signals?

A Yes. I guess the short answer is that we didn't think about it as clearly as we should have. The reason is that obviously one of the things that's affected when a cable system adds a distant signal is that it expects to get additional Basic subscriber revenue. The problem with that analysis is that, as I indicated both in the written testimony and this morning, there are other sources of additional revenue that are associated with the addition of a distant signal. If you add a distant signal and you add some Basic subscribers, some of those additional subscribers will take other services. There may be additional advertising revenues because viewing on some other services are increased. As a result of that, you expect to get additional revenue from sources other than basic subscriber revenue. And for that reason, Basic subscriber revenue only imperfectly

-- increases in Basic subscriber revenue only imperfectly measure the value of adding a distant signal. And when we realized that, we abandoned that particular line of analysis.

Q There is a way to separate out the revenues that are attributable specifically to subscriptions to cable services as compared to revenues or --

A Yes, but you'd have to identify or link those to the change in the distant signal, and that would be extraordinarily difficult. The alternative approach is to simply treat the additional royalty payment as a measure of the additional revenue from all sources, and that's a much more straightforward way to proceed.

Q Let me ask you, on this approach where you were looking at Basic revenues, did you run it through to the point where you were getting some results?

A Yes.

Q And do you recall what the share was, for instance, for Movies and Series?

A My recollection now is overall the results were very poor, but the share of Movies and Series was highly significant, as in this one, and the other -- I really can't remember the others, but they were, in fact, generally not significant, and the overall

explanatory power of the equation was quite poor.

Q When you say the results were very poor, what are you referring to?

A Basically, overall explanatory power, things like the R_2, these were not -- here is a case where one actually learned something from doing the analysis. In fact, usually one thinks of theory as informing empirical work. Here is a case when after one did the empirical work, one realized there was something wrong with one of the theories.

Q What was the R_2 value, do you recall?

A They were very low, I can't even recall -- well below 10 percent, I believe.

Q And do you recall what the coefficient was that you estimated for Movies and Series?

A I can't now with any detail, no.

Q Do you recall that it was lower than the number that you have on this board behind you, 90 percent?

A My recollection now, and it's dim because we abandoned this approach a long time ago, is that, in fact, the coefficients of the other categories, categories other than Movies and Series, were, in fact, either zero or negative, and that, nonetheless, Movies and Series turned out to be significant but, in

fact, the overall explanatory power of the equation was quite poor.

Q But do you recall whether it was below the 90 percent number?

A I do not.

Q Any other specifications that you looked at aside from the one you've been describing?

A Well, we carried out the analysis using the unweighted data for a while, at which point we concluded that, in fact, the weighted equation worked a lot better than the others and, at that point, we primarily -- entirely -- carried out our analysis in terms of the Preferred equation as a reference point, and other equations relative to it.

Q Now, you mentioned the R_2 value, and am I right that the R^2 value for your Preferred specification is 23 percent?

A It's approximately that, yes.

Q And the R^2 is a measure of the extent to which you are explaining the variation in the dependent variable with your equation, is that right?

A Correct.

Q And so a higher R^2 is an indication of a better fit?

A Correct.

Q So, in this instance, 77 percent of the variation that we see in the dependent variable is not explained by your equation, is that right?

A That's correct. I would just sort of add, sometimes R^2 can be a misleading measure, or at least comparative R^2 can be misleading. The R^2 we have here, for equations like this one in which we're using cross-section data and we're looking at first changes for differences, in effect, the R^2 that we have is actually quite substantial for this type of work. This is not a low R^2 by what you generally tend to expect in equations in which you're explaining first differences. Moreover, the statistical significance of the individual coefficient, particularly the coefficient on Movies and Series, is, in fact, very significant.

Q But when you have a low R^2, what it tends to suggest is that there are other variables that you haven't included in your equation that would provide further explanatory power, isn't that right?

A Not necessarily. It's possible that the other remaining variation is random. In fact, one hopes that, in fact, that's the case. One generally does not expect -- one generally gets suspicious when equations have R^2 that are .999 or whatever, because

those -- generally speaking, there are going to be random factors in any economic relationship that can't be explained by any variables. And so I would quibble with the notion that there are omitted variables. It is entirely consistent with the fact that there are simply just random factors that, in fact, can't be explained by economic variables.

Q Well, or things that you haven't explained by your equation.

A Well, there could be either one of those two. All I'm saying is that your question seemed to imply that if only we had gotten the right set of variables, we would have gotten the R^2 up to 1, and I'm saying that's not a reasonable expectation.

Q Right. I guess a better way to put it is, there are things that are difficult to measure in an econometric formula. There are certain things that are just simply difficult to predict this way.

A Yes, and, in fact, those things, for example, of course, that are random elements. You are not -- by definition, cannot explain them.

Q Right. So that the precision that one draws out of a formula like this has to be tempered by the recognition that there is, in fact, a lot of variation that you are really not explaining through

this formula.

A That's correct.

Q And, again, going back to what you said at the outset, I take it you looked to the R^2 value as an important reason for discarding this first approach that you were looking at.

A Well, not that alone. It's also the case that the precision of the other coefficient seemed to be very poor. One way to think about it is -- again, I think this is a case where the theory was important to us -- that the results for the royalty equation were much better in all respects. When we thought about it a little harder, we realized that, in fact, that is the variable we should have been using all the time.

Q But you could have gone back and separated out Basic subscriber revenues from these other sources of revenue, if you had wanted to.

A I think that would have been -- no, I think that would have been a virtually impossible undertaking.

Q You don't think the data were available?

A One would have had to, in fact -- that's right, we will have identified the changes in all of the others. In fact, we were given Basic subscriber

revenue. It turns out that royalties is a very good measure because the royalty -- your willingness to pay additional royalties reflects the revenues you get from all sources. So, in fact, that stands in as a very good proxy for the incremental revenue from all sources.

Q Couldn't it well be the case that you received much more in revenues from carrying an additional distant signal, than you have to pay as a compulsory license? Isn't that --

A That's correct, but, remember, these are measured in percentage terms, number one. Yes, the point is you get some extra revenues. Those are not all extra profits. In any event, there are revenues from a variety of sources, all of which you have to take into account.

Q But there could well be situations where because the compulsory license is a set figure, that the cable operator could reap much more in revenues and profits from carrying the distant signal, than it has to pay as a compulsory license.

A That's what it hopes to be able to do.

Q Right. And that follows from the fact that we have a compulsory license fee set by statute as compared to the market, right?

A Well, I would just add one point, that a rational profit maximizing cable operator ought to be adding distant signals to the point where the additional revenues from all sources, from adding the last signal, is at least equal to the additional royalty payments.

Q Well, that's not literally right, is it, because when the cable operator adds a distant signal, it has opportunity costs, doesn't it?

A Those are all to be reckoned in the calculation.

Q No, but the opportunity costs are an additional cost above and beyond the cost of the compulsory license that the cable operator takes into account in deciding whether it's going to carry that additional distant signal.

A I'm not sure which opportunity cost you're referring to.

Q Well, are you aware that there's a fixed number of channels available on most cable systems?

A Correct.

Q So that when the cable operator decides to carry a distant signal, it's deciding not to carry something else.

A But that ought to be reflected in

additional value -- I'm sorry -- the value of carrying the additional signal ought to take that into account.

Q But the compulsory license fee doesn't because the compulsory license fee is not something that is negotiated with the cable operator.

A Let's take that as a given number that you have to pay if you add a distant signal. You want to compare that to the additional revenue from all sources and add up any opportunity costs. Assuming you could adjust distant signals fractionally, you would keep adding -- you would add distant signals to the point where the additional revenue from the last signal added -- additional value less revenue less opportunity cost -- is just equal to the additional royalty payments you must make based on the license fee that you're required to pay. The only qualification there is because signals can only be added in integers. You may, in fact, stop at the point where the last signal you added is worth more than a compulsory license fee, and the next signal that you could have added is, in fact, worth less than it.

Q Let's go back to first principles. You would agree that with respect to any given distant signal that a cable operator carries, you can't say

that the value of that signal equals how much the operator pays in compulsory license.

A No, I said that a profit maximizing -- again, let's leave --

Q Let's just focus on that one first.

A Let's leave integers aside. It ought to be the case, the operator ought to be carrying distant signals to the point where the additional value of the last signal carried is just equal to the additional royalty payments.

Q Well, let's take an example where the cable operator only has available five channels. Let's assume that. And he's got a choice between whether he wants to carry distant signals for those five open channels, or whether he wants to carry a pay channel, whether he wants to carry a specialty cable channel of some sort, and if he decides that he would make more money off of the pay channel than he would off of the distant signal, he may well decide to carry that pay channel even though the value to him of that distant signal exceeds the compulsory license.

A That's correct.

Q You agree with that?

A That's correct.

Q And this is inherently a function of the

fact that there are limited numbers of cable channels.

A For some systems, yes.

Q Now, you discussed before with Commissioner Goodman, I believe, the question of how one can rely on econometrics to model behavior, and I think the example you gave was with respect to automobile prices, and I believe you mentioned wheelbase and horsepower?

A It seems to me -- my recollection is, those are among the variables that were, in fact, used in some of the early attempts to model some of the prices of automobiles.

Q So that there were models, and you were giving us an example there were models where one would look at the price of an automobile as being predicted by a number of variables such as wheelbase and horsepower and the like?

A That's correct.

Q Now, in such a model, the price of the automobile moves freely, right, because it's a marketplace price?

A Precisely.

Q And in the model you have developed here, the price doesn't move freely at all, does it?

A No, but, in fact, that's -- I'm sorry --

no.

Q And here we're looking at a price term that is based on statutory formula, is that right?

A Correct.

Q And that price term may well not move in the same way that a market price would move, would you agree with that?

A Yes.

Q Now, let me take an example. I hate to go back to Mr. Stewart's stuff -- I won't mark on it, John.

MR. STEWART: Please do.

BY MR. HESTER:

Q I just didn't want to have to redraw all of this. Let me ask you to assume here that we're in period one, and we've got only three distant signals being carried -- A, B, C. Can you follow this, or would it be easier if I redrew --

A I can see it thus far.

Q Okay. I'm in period one, and I'm a cable operator, and I've got three distant signals I am carrying. And I'm paying a total of $1,000 in compulsory license fees. In period two, I switch, and I drop C and I go to D, and the reason I have done that is because I have realized that my subscribers

are utterly discontented with the slate of distant signals I'm carrying. They are just very bored, and I've got a real problem I'm facing. I'm concerned I'm going to lose subscribers. I take it that's a real problem in the cable industry. You've heard of this phenomenon of "churn"?

A Yes.

Q So, the cable operator here -- and I'll ask you to assume this -- decides to substitute a new distant signal, very hot distant signal. His judgment is that this will be very attractive programming. Has a lot of value to the cable operator because he's not going to lose subscribers that he has carefully built up over time. And, indeed, he's precisely successful. He holds onto his subscriber base, his revenues stay flat, very happy with what he has done. There's a real value to him in D over C. He pays the same amount, pursuant to the statutory formula set up. He pays the same amount.

I take it this is an example -- are you with me so far in my example?

A Yes.

Q Now, this is one of the examples included within your study, right -- this sort of example?

A Right.

Q And yet you're going to show zero incremental royalty payments associated with this change.

A Well, I guess I would have a different hypothetical. My hypothetical, those people are dissatisfied with C. When it's replaced by D, the operator gets some additional revenues from a variety of sources, and actually gets some additional Basic subscriber revenue, and is, in fact, willing to pay the additional subscriber fee.

Q That's another hypothetical. I just want to use this one to illustrate -- and I recognize there are others. But in this one, your model would pick up as the dependent variable -- the price variable here would show zero percent increase in what the cable operator was willing to pay for that --

A If, in fact, the substitution of C to D did nothing. Your version of it is, I take it, if he hadn't replaced C with D, he would have lost something, and he knew that, and before it ever happened he replaced C with D.

Q I'm asking you to assume --

A Yes, in fact, he would not pick up anything.

Q I'm asking you to assume that. And the

reason he doesn't pay anything more is because we're working off a statutory formula here, where the prices that he pays, the compulsory license fees that he pays are set.

A Well, remember, the fees he pays are set and, in your example, the amount he pays is set. But even if the fees were set, the amount he could pay could be different if, in fact, substituting C -- replacing C with D had increased Basic subscriber revenues.

Q Right, but I want you to assume -- I'm assuming a situation where the cable operator would, in fact, be willing to pay a lot for D. D is very valuable to him. And the reason D is very valuable to him is it allows him to hold onto subscribers he would otherwise lose. And your model isn't going to measure that.

A In your example, your result -- which I think is logically correct -- results from the fact that, in fact, he didn't already -- this operator was so prescient that before C -- before the subscribers got tired of C, he was smart enough to replace it with D, and he never got the decline in revenues that sticking with C would have resulted.

An alternative, equally plausible -- and

certainly consistent with behavior -- is he kept C. People got dissatisfied with it. Revenues went down. And when he replaced it with D, they went up. The difference, therefore, represent the value of replacing C with D.

Q The point I'm trying to make is that in a conventional model -- I know only enough econometrics to be dangerous -- but in a conventional model -- I take it there are many models where we try to model price as a function of X-plus-Y, and each of those -- and you try to measure the coefficient. You try to estimate A and B. And then you say, well, we know what X and Y is and, therefore, we can predict a price or, alternatively, if you know what price is, you know what X is, you know what Y is, through the ordinary least squares method that you described, you end up with estimates of A and B.

But I would submit that's a model that works best when you have a price that moves, and we don't have one here.

A That's not correct. Actually, I have two responses. One, if your hypothetical was at all accurate so that it really represented the world -- that is, most of our observations looked like that -- we would, in fact, have gotten no explanatory power in

our equation, and none of our coefficients would have been significant. So, that couldn't have been the case.

Second, there, in fact, is price variation. You're quite right, you need price variation. Where the price variation comes from is basically across systems. We have systems that find themselves in different circumstances, and what we are doing is we are exploiting the fact that when different systems add distant signals, they add different amounts to their royalty payments, despite the presence of a fixed statutory schedule, and we relate those variations in royalty payments -- that is, the percentage change in royalty payments -- to the percentage changes in the quantities on the right-hand side. There's nothing inconsistent with that analysis and the way in which we, in fact, estimated -- or the standard economic analysis.

Q But what you are ending up measuring here is not precisely then value. What you are ending up measuring is how much cable operators are willing to change their compulsory royalty payments.

A But that's exactly what we want to measure.

Q You're measuring -- and you agree with me. You are measuring how much they are willing to change

their compulsory royalty payments.

A Which is a measure of the value of the programs on the signals.

Q But it's not a direct measure, for the reason we already discussed. They may be willing to change their royalty payments in ways that are different from how much they would be willing to pay in a free market, you would agree with that?

A I don't believe I agree with that.

Q But we've already established there may well be instances where the cable operator is willing to pay the compulsory license to carry a distant signal, but the value to him is greater than that.

A The point is --

Q Answer that one first. Do you agree with that?

A I do, but I'm not sure I agree with its relevance.

Q But you agree, first of all, that the cable operator may well be willing to pay more than he has to for the compulsory license to carry a signal.

A Yes, but then, if that were true, except for the integer problem, you ought to be adding still more signals.

Q Well, I agree with that, but we already

talked about opportunity costs.

A No, opportunity costs are reckoned in the calculation of value.

Q Well, we already talked about limited channel capacity, and that's going to affect the decisions the cable operator makes.

A If his system could not add channel capacity. If the channel capacity was limited, yes, that would be a problem.

Q And you are aware that many cable operators are, in fact, subject to channel capacity restrictions.

A Some are, some aren't.

Q But the point is, your model is measuring how cable operators act in relation to compulsory license payments, right?

A But those are, in fact --

Q No. Answer yes or no because I think that is a yes or no.

A Yes.

Can I say yes, but?

Q Okay. Actually, in fairness, I should give you the "but".

A Yes, but that's, in fact, the measure of the price they actually face.

Q But it's not what they are actually willing to pay, necessarily.

A What we know is that they are willing to pay an amount at least that large.

Q But they may well be willing to pay an amount larger.

A If you see the statement in the text, that's precisely what I say.

Q Well, let me ask you about that. If you could turn to page -- I guess it's the language that Mr. Stewart quoted with his ellipsis earlier.

A No, I don't think so.

Q I was looking at page 4, over to the top of page 5, where it's the last sentence on page 4, over to the top of page 5, where you say, "This means that one must measure what operators are willing to pay for programs by observing what they actually chose to pay for them".

A No, that's not the sentence I wanted to --

Q But I wanted to direct you to that one.

A I agree, but you've asked me where the statement appears, and it appears on page 6, the full paragraph -- "Operators will add distant signals only if the increase in revenue that is attributable to the programs on those signals is at least as great as the

additional royalty payments the operator must make to carry the signals".

Q I'm sorry, could you --

A I'm sorry. Page 6, the full paragraph, second sentence: "Operators will add distant signals only if the increase in revenue that is attributable to the programs on those signals is at least as great as the royalty payments the operator must make to carry the signals".

Q And I take it implicit in that sentence is the recognition on your part that there may well be instances where they would be willing to pay more than what they pay as a compulsory license?

A Yes.

Q And, therefore, it is not necessarily the same thing to say that what they pay as a compulsory license is what they would be willing to pay for the distant signal?

A With that caveat, yes.

MR. HESTER: That's all I have. Thank you.

CHAIRPERSON DAUB: Thank you, Mr. Hester. Mr. Gottfried?

MR. GOTTFRIED: Thank you, Madam Chairman. I will try to be brief, and I know I can count on Commissioner Goodman to ensure that I don't do too

much.

Dr. Besen, I'm Barry Gottfried, and I'm here representing the Devotional Claimants. It's a pleasure to see you again.

CROSS-EXAMINATION

BY MR. GOTTFRIED:

Q I just want to make a small point that I think you won't have any problem with. The Preferred equation you use uses viewing hours as opposed to hours, is that right?

A It takes the hours and reallocates them based on viewing.

Q Or weights them?

A Yes, weights them.

Q And that's the equation that gave us a 1?

A That's correct. Well, actually, no -- excuse me -- gave you a 1 percent?

Q One percent.

A Well, actually, almost all of the equations give a 1 percent.

Q Well, the unweighted one didn't, the one that weighted them did.

A It's all of the ones that were weighted.

Q Correct. Now, I don't know if you're aware of it but, in previous years, MPAA has made a point

about the relationship of the total quarter viewing hours of Devotional programs to the distant viewing -- the time to viewing. They say that we have more time than viewing, and that that's significant.

I just want to establish that insofar as there is a difference -- insofar as there is a difference -- your Preferred equation takes account of that difference, isn't that correct?

A When we weight by viewing -- the share to be ascribed to Devotional Claimants of 1 percent takes into account viewing as weights, correct.

Q And so it would take into account -- I guess I wasn't clear enough -- any difference between these numbers, or any ratio?

A They are taken into account in the variable that we've constructed.

Q And are weighted in the Preferred equation.

A Correct.

Q So, is it fair to say that taking into account any difference that there might be, your study shows that the Devotional programs account for 1 percent of the value of programming on distant signals?

A That's correct.

Q I didn't think you'd have any trouble with

that.

Let me go back to a point that I think Commissioner Goodman was discussing at about ten to 12:00, about the use of hours. This one I don't think is going to be quite as easy for me, but we'll try.

Let me just direct your attention to pages 21 and 22 of your statement, and specifically to the top of page 22 where you say: "This adjustment" -- and I think you're talking about the weighting for hours -- "permits us to take into account differences in program 'quality', to the extent that viewership is correlated with quality, as well as differences in viewing levels across dayparts", do you see that?

A I do.

Q Now, theoretically, if you had the data, isn't it true that you could have used a different weighting system, something other than ratings, if you had the data? Well, let me give you a concrete example.

Suppose MPAA had come to you and they had done a study, and they had done something like what Commissioner Goodman was talking about. They had gone to every cable system in the United States, and they had asked them, with every particular program -- each program now: the Cubs game, the 700 Club, and a local

program -- what is the value of that program to you in attracting and retaining subscribers? Get the hypothetical? I want to call that, if I can, subscription value.

A Obtained by asking operators what they are willing to pay.

Q I understand that.

A Fine. You understand what my objection to it would be, but go ahead.

Q And you had used this to weight -- because I thought this was what Commissioner Goodman was getting at -- you had used this as the weight, instead of ratings, when you analyzed what cable operators had actually done between periods. In other words, if they had picked up WGN and on that was a Cubs game for one hour -- and I'll have to assume there's some kind of a scale, I don't know how the scale would look -- the Cubs game represents 3 percent of value, or the 700 Club represents 2 percent of value, you had weighted that accordingly.

My question is, you don't know, do you, whether the R^2 number, or the analysis you do in Footnote in 35, would have turned out to show a higher correlation, a higher explanatory value for this kind of weighting and for hourly weighting?

A No, but there's a problem with the hypothetical.

Q But the answer is no, you don't.

A Well, I'd like to go on if I --

Q I'll give you a chance. I just want to establish that point. As far as what you call statistical precision, or explanatory power, you don't know whether the equation so weighted would have given you a .29 or a .83 or the kind of results you got when you said you used revenues, a .10?

A Well, the problem I'm having --

Q Well, is the answer yes or no, if there's an answer, and it says you don't like weighting this way.

A It's more than that here. Here we're using information about values to estimate values. It seems to me the system is somehow overdetermined -- that is, if you've already no values and you believe those estimates, I'm not sure why one needs the analysis to get at the relative values. Somehow you're starting with the relative values.

Q I was bringing in the values to determine whether, in fact -- I was checking the values, as it were, unless I misunderstand, by saying don't those valuations predict what cable operators actually do

between periods? Here we get a good explanatory equation about which signals are dropped and which signals are added if we weigh programs based on what cable operators say is the value of each program to them.

A I suppose you could do this as a piece of mathematical or statistical analysis. It just seems to me at first blush that there's an inconsistency between using these values as the weights in an equation which is designed to determine what the values are.

Q But the answer is, you don't know which of these numbers you'd get, do you?

A No.

MR. GOTTFRIED: I have no further questions.

CHAIRPERSON DAUB: Mr. Lane, any redirect?

REDIRECT EXAMINATION

BY MR. LANE:

Q Dr. Besen, in several instances you've indicated that you used the percentage change in the program by category from period-to-period. Could you explain why you did that?

A The basic idea was that we wanted to explain the percentage change in revenues, and that we

wanted to relate those not to the absolute change in the programming in a particular category, but to its percentage increase. It makes a difference if one adds one hour of Sports programs, if the number of Sports program hours are only 10, and if one added one hour of Sports programming if the total number of Sports programming had previously been 100. And so the reason for looking at percentage changes was to take into account the amount of program hours in a particular category that the system had been carrying prior to the change.

Q Would that also tend to allow you to compare categories that have large numbers of hours with categories that have smaller number of hours?

A Yes, the -- if you had a program category that had, say, 10 program hours, and by adding a distant signal it added five hours in that category, that's a 50 percent increase. We would measure exactly the same percentage increase for a program category that, for example, had 100 hours of programs and it added 50 program hours. Those would be the same percentage increase. The variables would be exactly the same for a program category where the increase was from 10 to 15 as it would be from, say, 100 to 150.

Q So that that would allow program categories that have a small number of hours, to have an equal chance or equal opportunity to have a greater share in the results?

A They would have -- in my particular example, they would both have exactly the same percentage increase in programs -- program hours.

Q Was one of the alternative analyses you did looking at reclassified signals, or omitting them from the analysis?

A We did.

Q Could you just explain what was involved in that?

A Well, we had a number of -- as the statement makes clear, we had a number of signals that had been classified as distant some of the time, and Local at other times. We confirmed that, in fact, those -- by inspection -- that, in fact, they seemed to be all distant signals. And so we classified them as distant throughout. However, if any of those signals were the signals that had been changed -- suppose there was a signal that was, in fact, classified as Local, say, in a period when it was dropped -- we had previously classified it as distant because once it had previously been classified as

distant. We ran the analysis including that observation as a dropped distant signal, but we also ran a separate analysis in which all those observations were deleted, and we -- just to make sure that our sample -- that our results were not being affected by those reclassifications and, in fact, we confirmed that those reclassifications had no effect -- virtually no effect -- on the estimated results.

Q Would you look at NAB Exhibit 43-X, please.

A (Complying.)

Q At the bottom of the first page is system CAA720?

A Correct.

Q Would that be one of the systems that would have been involved in the reclassification analysis that you would have dropped out?

A Yes.

Q And that CAA720 was also, was it not, the system that was the subject of NAB Exhibit 45-X and 46-X?

A It was one of them, yes.

Q And the effect of dropping those out, on the results, in your view, was --

A Virtually none.

MR. STEWART: I'm going to object to that

answer because there are two different things. One is a group of observations that were dropped out, and those were in his analysis and he analyzed those. Now we're talking about one of those observations, and I don't think he can say what the analysis would have been by dropping that out of all the Form 2s -- that is, the difference between the ones he did drop out and some subset of that, and I want to make sure we don't have an unclear record, that his response to that last question is that he has done the analysis to drop out the Form 2 systems that are in the database. I think those are two different issues.

CHAIRPERSON DAUB: The objection is overruled.

MR. LANE: Those are all the questions I have on redirect, Madam Chairman.

CHAIRPERSON DAUB: Thank you, Mr. Lane.

(Whereupon, the witness was excused.)

That concludes today's meeting, and we will reconvene on Wednesday, September 15, with Mr. Thrall, at 10:00 o'clock. Have a nice weekend.

(Whereupon, at 4:53 p.m., the hearing was adjourned, to reconvene Wednesday, September 15, 1993, at 10:00 a.m.)

C E R T I F I C A T E

This is to certify that the foregoing transcript

in the matter of: 1990 CABLE COPYRIGHT ROYALTY
DISTRIBUTION PROCEEDING
DOCKET NO. CRT 92-1-90CD

Before: COPYRIGHT ROYALTY TRIBUNAL

Date: SEPTEMBER 10, 1993

Place: WASHINGTON, D.C.

represents the full and complete proceedings of the aforementioned matter, as reported and reduced to typewriting.

Phyllis Young

JSC Exh 6-X

Household Viewing Hour Analysis

SAS

1

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
1	KABC	88	1160.0	1685.0	0.0	88.0	2533.0	4.0	5470.0
2	KABC	89	995.0	1877.0	0.0	22.0	2769.0	8.0	5671.0
3	KABC	90	330.0	2414.0	0.0	0.0	2820.0	0.0	5564.0
4	KATU	88	537.0	2601.0	0.0	0.0	2109.0	0.0	5247.0
5	KATU	89	382.5	2683.5	0.0	0.0	2200.5	0.0	5266.5
6	KATU	90	198.0	2751.0	0.0	0.0	2604.0	0.0	5553.0
7	KATV	89	156.0	4111.5	201.0	219.0	1506.0	0.0	6193.5
8	KATV	90	63.0	3840.0	0.0	240.0	1554.0	216.0	5913.0
9	KBHK	88	3038.0	9660.0	0.0	316.0	104.0	4.0	13122.0
10	KBHK	89	2684.0	10228.0	0.0	144.0	190.0	0.0	13246.0
11	KBHK	90	3356.0	9524.0	0.0	192.0	212.0	12.0	13296.0
12	KCAL	89	1497.0	9628.0	190.0	664.0	1458.0	1.0	13438.0
13	KCAL	90	1060.0	9548.0	204.0	430.0	2188.0	0.0	13430.0
14	KCBS	88	389.0	1880.0	105.0	48.0	2103.0	0.0	4525.0
15	KCBS	89	266.0	2032.0	109.0	48.0	2065.0	0.0	4520.0
16	KCBS	90	232.0	1965.0	16.0	46.0	2201.0	112.0	4573.0
17	KCET	89	0.0	0.0	0.0	0.0	0.0	12913.0	12913.0
18	KCNC	88	6.0	1340.4	76.8	45.6	2841.6	1.2	4311.6
19	KCNC	89	0.0	1478.4	57.6	45.6	2778.0	0.0	4359.6
20	KCNC	90	0.0	1347.6	0.0	36.0	3081.6	96.0	4562.4
21	KCOP	88	3623.0	8835.0	8.0	288.0	658.0	8.0	13420.0
22	KCOP	89	3566.0	8802.0	0.0	402.0	624.0	16.0	13410.0
23	KCOP	90	3489.0	9150.0	0.0	136.0	634.0	0.0	13409.0
24	KCRA	88	244.5	2757.0	405.0	48.0	2236.5	1.5	5692.5
25	KCRA	89	39.0	2874.0	178.5	33.0	2392.5	0.0	5517.0
26	KCRA	90	12.0	2496.0	285.0	0.0	3318.0	0.0	6111.0
27	KDKA	88	156.0	3058.0	178.0	48.0	1919.0	4.0	5363.0
28	KDKA	89	228.0	3031.0	165.0	48.0	2084.0	1.0	5557.0
29	KDKA	90	112.0	3486.0	266.0	0.0	1778.0	16.0	5658.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
1	326278.00	2005015.0	0.0	2916.0	3778585.0	0.0
2	167664.00	1566883.0	0.0	0.0	3168134.0	0.0
3	14972.00	625295.0	0.0	0.0	2015634.0	0.0
4	805.50	824286.0	0.0	0.0	878259.0	0.0
5	573.75	748234.5	0.0	0.0	1217032.5	0.0
6	297.00	1111045.5	0.0	0.0	1395708.0	0.0
7	234.00	2388678.0	455431.5	62745.0	1853091.0	0.0
8	94.50	1979125.5	0.0	37692.0	2049201.0	388986.0
9	5249154.00	8504904.0	0.0	50715.0	12028.0	13653.0
10	4751330.00	10689714.0	0.0	4744.0	16094.0	0.0
11	4829371.00	7099256.0	0.0	2689.0	16996.0	28137.0
12	1585119.00	8631111.0	566051.0	71011.0	470811.0	0.0
13	1437323.00	7271482.0	723885.0	84412.0	1393433.0	0.0
14	152476.00	1518384.0	181554.0	1040.0	1865769.0	0.0
15	39654.00	1694581.0	218775.0	1530.0	846111.0	0.0
16	11966.00	968349.0	14124.0	3916.0	538906.0	171364.0
17	0.00	0.0	0.0	0.0	0.0	12964752.0
18	7.20	733758.0	177164.4	523.2	4668693.6	0.0
19	0.00	1028407.2	185402.4	3230.4	4571680.8	0.0
20	0.00	536818.8	0.0	9050.4	5232050.4	393402.0
21	3431324.00	6960059.0	0.0	14680.0	133214.0	3633.0
22	4069190.00	6433427.0	0.0	13028.0	128321.0	62448.0
23	2284155.00	5482501.0	0.0	5721.0	128296.0	0.0
24	366.75	1982635.5	561858.0	0.0	1601485.5	0.0
25	58.50	2447407.5	330435.0	0.0	2016253.5	0.0
26	18.00	2468842.5	721635.0	0.0	2505331.5	0.0
27	47510.00	1462451.0	305850.0	1720.0	1235978.0	0.0
28	28760.00	1878988.0	158095.0	1362.0	833245.0	502.0
29	19951.00	1809201.0	277308.0	0.0	823956.0	7036.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
30	KDOC	88	1316.0	8842.0	64.0	280.0	2668.0	122.0	13292.0
31	KDOC	89	910.0	9844.0	0.0	290.0	2316.0	0.0	13360.0
32	KDVR	89	7843.2	17716.8	24.0	864.0	91.2	14.4	26553.6
33	KERA	89	0.0	0.0	0.0	0.0	0.0	11047.0	11047.0
34	KFCB	89	18.0	3222.0	80.0	6656.0	2892.0	0.0	12868.0
35	KFMB	88	361.5	2229.0	0.0	96.0	2364.0	0.0	5050.5
36	KFMB	89	282.0	2155.5	0.0	96.0	2227.5	0.0	4761.0
37	KFMB	90	84.0	2503.5	0.0	51.0	2325.0	0.0	4963.5
38	KGO	88	478.0	2786.0	0.0	0.0	2234.0	4.0	5502.0
39	KGO	89	455.0	2797.0	0.0	0.0	2363.0	0.0	5615.0
40	KGO	90	129.0	3545.0	0.0	0.0	1901.0	0.0	5575.0
41	KGTV	88	339.0	3663.0	19.5	237.0	1840.5	0.0	6099.0
42	KGTV	89	300.0	3247.5	19.5	265.5	2032.5	0.0	5865.0
43	KGW	88	258.0	2224.5	0.0	0.0	1905.0	0.0	4387.5
44	KGW	89	210.0	2508.0	0.0	0.0	1660.5	0.0	4378.5
45	KGW	90	126.0	2655.0	0.0	6.0	1992.0	0.0	4779.0
46	KHJ	88	2439.0	7486.0	270.0	904.0	2307.0	1.0	13407.0
47	KICU	88	4320.0	7188.0	257.0	608.0	959.0	10.0	13342.0
48	KICU	89	5483.0	5833.0	207.0	762.0	953.0	10.0	13248.0
49	KICU	90	5270.0	5130.0	237.0	640.0	1142.0	0.0	12420.0
50	KMBC	89	166.0	4165.0	127.0	88.0	1601.0	0.0	6147.0
51	KMEX	88	1747.0	10742.0	0.0	160.0	95.0	0.0	12744.0
52	KMEX	89	1971.0	10367.0	0.0	48.0	375.0	1.0	12762.0
53	KMEX	90	2239.0	9454.0	0.0	476.0	558.0	0.0	12727.0
54	KMGH	88	294.0	3132.0	12.0	117.6	1381.2	0.0	4936.8
55	KMGH	89	326.4	3238.8	87.6	96.0	1179.6	0.0	4928.4
56	KMGH	90	195.6	3532.8	12.0	96.0	1332.0	64.8	5234.4
57	KMSP	88	2664.0	9373.0	300.0	240.0	854.0	4.0	13435.0
58	KMSP	89	2766.0	9460.0	131.0	216.0	865.0	0.0	13438.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
30	184245.00	3305360.0	0.0	26410.0	912269.0	43504.0
31	112562.00	5650110.0	0.0	10060.0	689477.0	0.0
32	9411.84	7470634.8	21024.0	6000.0	0.0	11665.2
33	0.00	0.0	0.0	0.0	0.0	6680969.0
34	0.00	61771.0	0.0	221351.0	33483.0	0.0
35	542.25	115269.0	0.0	0.0	63522.0	0.0
36	423.00	223282.5	0.0	957.0	87063.0	0.0
37	126.00	269733.0	0.0	0.0	83794.5	0.0
38	378706.00	4302075.0	0.0	0.0	3199410.0	4772.0
39	279594.00	4221954.0	0.0	0.0	3193707.0	0.0
40	29636.00	2867240.0	0.0	0.0	1775435.0	0.0
41	508.50	164608.5	0.0	6897.0	90655.5	0.0
42	450.00	123793.5	0.0	6870.0	6894.0	0.0
43	387.00	1403950.5	0.0	0.0	1189765.5	0.0
44	315.00	1581451.5	0.0	0.0	916522.5	0.0
45	189.00	1357611.0	0.0	970.5	1323589.5	0.0
46	1718942.00	7278230.0	836612.0	288110.0	939748.0	0.0
47	4552953.00	5150110.0	753480.0	107318.0	269739.0	13809.0
48	5009294.00	4369568.0	507351.0	55556.0	267660.0	14696.0
49	3800054.00	4840058.0	873522.0	49697.0	180594.0	0.0
50	14601.00	1623655.0	65614.0	4984.0	806597.0	0.0
51	1675012.00	20692666.0	0.0	85012.0	39257.0	0.0
52	795991.00	7570428.0	0.0	710.0	28581.0	0.0
53	1082780.00	7458082.0	0.0	9873.0	638248.0	0.0
54	352.80	2897434.8	46404.0	11911.2	1002991.2	0.0
55	391.68	3526299.6	25952.4	9312.0	1008324.0	0.0
56	234.72	4128736.8	31638.0	12343.2	930876.0	25179.6
57	3876637.00	12114422.0	2526992.0	20022.0	1260725.0	7164.0
58	3678859.00	10673768.0	379583.0	38934.0	1589381.0	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
59	KMSP	90	2772.0	9375.0	204.0	140.0	948.0	0.0	13440.0
60	KMST	88	148.5	3465.0	108.0	33.0	1113.0	0.0	4867.5
61	KMST	89	0.0	3090.0	103.5	18.0	1018.5	0.0	4230.0
62	KMST	90	0.0	3273.0	189.0	66.0	705.0	0.0	4233.0
63	KNBC	88	24.0	1954.0	0.0	0.0	2232.0	10.0	4220.0
64	KNBC	89	24.0	2083.0	0.0	0.0	2371.0	0.0	4478.0
65	KNBC	90	32.0	2290.0	0.0	0.0	2472.0	0.0	4794.0
66	KNSD	89	183.0	3399.0	0.0	0.0	1143.0	0.0	4725.0
67	KOFY	88	2051.0	10471.0	0.0	0.0	232.0	3.0	12757.0
68	KOFY	89	1809.0	10617.0	0.0	0.0	627.0	6.0	13059.0
69	KOFY	90	896.0	11110.0	20.0	20.0	819.0	0.0	12866.0
70	KOIN	88	129.0	3322.5	144.0	414.0	1722.0	0.0	5731.5
71	KOIN	89	142.5	3232.5	76.5	330.0	1740.0	0.0	5521.5
72	KOIN	90	42.0	3357.0	135.0	96.0	1866.0	0.0	5496.0
73	KOVR	88	276.0	4017.0	15.0	249.0	1692.0	7.5	6256.5
74	KOVR	89	472.5	4075.5	0.0	268.5	1626.0	1.5	6444.0
75	KPIX	88	403.0	3335.0	259.0	21.0	1254.0	24.0	5296.0
76	KPIX	89	207.0	3312.0	287.0	25.0	1502.0	0.0	5333.0
77	KPIX	90	170.0	2925.0	238.0	0.0	1961.0	112.0	5406.0
78	KPLR	88	4441.0	7857.0	415.0	152.0	575.0	0.0	13440.0
79	KPRC	89	192.0	2113.2	0.0	182.4	1896.0	0.0	4383.6
80	KPTV	88	2803.5	9070.5	162.0	480.0	666.0	0.0	13182.0
81	KPTV	89	2559.0	9114.0	159.0	468.0	729.0	0.0	13029.0
82	KPTV	90	2887.5	8731.5	0.0	432.0	949.5	111.0	13113.0
83	KQED	89	0.0	0.0	0.0	0.0	0.0	12217.0	12217.0
84	KQTV	88	229.5	2779.5	97.5	658.5	1225.5	0.0	4990.5
85	KQTV	89	192.0	3258.0	154.5	345.0	1045.5	0.0	4995.0
86	KRIV	89	2636.4	9300.0	15.6	336.0	1036.8	3.6	13328.4
87	KRMA	89	0.0	0.0	0.0	0.0	0.0	10055.0	10055.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
59	3679123.00	11446156.0	311826.0	21182.0	1333665.0	0.0
60	222.75	243060.0	0.0	0.0	27444.0	0.0
61	0.00	255609.0	0.0	6825.0	2463.0	0.0
62	0.00	334809.0	6894.0	0.0	28041.0	0.0
63	7624.00	1257581.0	0.0	0.0	1396225.0	2393.0
64	12452.00	1467071.0	0.0	0.0	2008249.0	0.0
65	0.00	968680.0	0.0	0.0	1717534.0	0.0
66	274.50	166461.0	0.0	0.0	84750.0	0.0
67	785413.00	4709114.0	0.0	0.0	42431.0	0.0
68	571494.00	3984865.0	0.0	0.0	104701.0	2691.0
69	258953.00	3366101.0	17517.0	0.0	53237.0	0.0
70	193.50	1638079.5	147322.5	24144.0	1042108.5	0.0
71	213.75	1755127.5	136572.0	23808.0	1340092.5	0.0
72	63.00	1444509.0	275665.5	9942.0	987219.0	0.0
73	414.00	1018843.5	0.0	2148.0	300265.5	0.0
74	708.75	903042.0	0.0	13222.5	154896.0	0.0
75	236954.00	3954881.0	517896.0	1190.0	1546144.0	13045.0
76	197917.00	3425331.0	670294.0	0.0	1082944.0	0.0
77	243496.00	2388845.0	373258.0	0.0	1415247.0	55702.0
78	3562871.00	6057955.0	533493.0	6410.0	343240.0	0.0
79	230.40	440802.0	0.0	5080.8	554588.4	0.0
80	4205.25	8637858.0	215547.0	42735.0	578389.5	0.0
81	3838.50	9961068.0	225771.0	42099.0	779343.0	0.0
82	4331.25	8019282.0	0.0	49702.5	878392.5	157540.5
83	0.00	0.0	0.0	0.0	0.0	5749705.0
84	344.25	344965.5	26517.0	3678.0	9732.0	0.0
85	288.00	299220.0	5323.5	5094.0	10098.0	0.0
86	3163.68	1627660.8	0.0	16125.6	141339.6	1759.2
87	0.00	0.0	0.0	0.0	0.0	5020247.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
88	KRON	88	126.0	2747.0	0.0	78.0	2024.0	4.0	4979.0
89	KRON	89	147.0	2837.0	0.0	48.0	2119.0	0.0	5151.0
90	KRON	90	392.0	2950.0	0.0	0.0	2412.0	0.0	5754.0
91	KSBW	88	451.5	2526.0	0.0	186.0	1828.5	0.0	4992.0
92	KSBW	89	319.5	2692.5	0.0	117.0	1695.0	0.0	4824.0
93	KSBW	90	249.0	2787.0	0.0	96.0	1764.0	0.0	4896.0
94	KSDK	90	104.0	3469.0	24.0	0.0	1967.0	132.0	5696.0
95	KSHB	88	2418.0	10285.0	84.0	0.0	288.0	0.0	13075.0
96	KSHB	89	2042.0	10764.0	100.0	0.0	292.0	0.0	13198.0
97	KSHB	90	1502.0	11304.0	0.0	0.0	150.0	72.0	13028.0
98	KSL	88	250.5	3631.5	73.5	78.0	1395.0	0.0	5428.5
99	KSL	89	252.0	4065.0	90.0	99.0	1342.5	0.0	5848.5
100	KSL	90	229.5	3202.5	0.0	48.0	2565.0	54.0	6102.0
101	KSNT	88	33.0	3088.5	111.0	556.5	1086.0	0.0	4875.0
102	KSNT	89	124.5	2437.5	114.0	276.0	955.5	0.0	3907.5
103	KSNT	90	195.0	2376.0	0.0	192.0	723.0	36.0	3522.0
104	KSTW	88	3339.6	8631.6	0.0	679.2	727.2	0.0	13377.6
105	KSTW	89	3982.8	7779.6	243.6	686.4	714.0	1.2	13407.6
106	KSTW	90	3379.2	8076.0	319.2	369.6	1269.6	0.0	13413.6
107	KTLA	88	2224.0	9543.0	244.0	548.0	859.0	18.0	13436.0
108	KTLA	89	2365.0	9444.0	233.0	484.0	907.0	3.0	13436.0
109	KTLA	90	2152.0	9270.0	316.0	484.0	1218.0	0.0	13440.0
110	KTSF	89	1734.0	7048.0	0.0	1776.0	2668.0	0.0	13226.0
111	KTTV	88	2899.0	9286.0	245.0	285.0	720.0	1.0	13436.0
112	KTTV	89	2186.0	9576.0	262.0	308.0	1108.0	0.0	13440.0
113	KTTV	90	820.0	11016.0	210.0	192.0	981.0	0.0	13220.0
114	KTVT	88	3488.4	8882.4	540.0	271.2	220.8	37.2	13440.0
115	KTVT	89	2779.2	9650.4	320.4	259.2	399.6	31.2	13440.0
116	KTVT	90	2784.0	9112.8	532.8	345.6	648.0	0.0	13423.2

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
88	101204.00	2013848.0	0.0	6814.0	1188493.0	0.0
89	61406.00	2033860.0	0.0	0.0	1108879.0	0.0
90	249452.00	1763505.0	0.0	0.0	881597.0	0.0
91	677.25	772581.0	0.0	12108.0	318621.0	0.0
92	479.25	1332492.0	0.0	27414.0	387420.0	0.0
93	373.50	803332.5	0.0	0.0	438709.5	0.0
94	12942.00	1316049.0	6852.0	0.0	1047854.0	33412.0
95	3434931.00	14094221.0	194604.0	0.0	101035.0	0.0
96	3048021.00	14186364.0	228305.0	0.0	105579.0	0.0
97	2110609.00	16622977.0	0.0	0.0	7466.0	377384.0
98	375.75	2288371.5	112228.5	17253.0	851626.5	0.0
99	378.00	2117347.5	148165.5	30981.0	773205.0	0.0
100	344.25	1718605.5	0.0	1278.0	685195.5	21666.0
101	49.50	1513872.0	127669.5	65289.0	557181.0	0.0
102	186.75	1032346.5	210391.5	13290.0	408555.0	0.0
103	292.50	873237.0	0.0	21448.5	444226.5	31464.0
104	4007.52	13167997.2	0.0	115484.4	1201363.2	0.0
105	4779.36	8371560.0	644941.2	74476.8	1119794.4	2446.8
106	4055.04	7413170.4	720708.0	19984.8	1337176.8	0.0
107	14057329.00	26938195.0	1064170.0	131668.0	3984604.0	42109.0
108	13297875.00	28528073.0	1675908.0	275588.0	3996520.0	25582.0
109	5369904.00	13688132.0	662889.0	121150.0	1662768.0	0.0
110	96939.00	466790.0	0.0	13756.0	210446.0	0.0
111	8305335.00	25780476.0	2363725.0	202972.0	1046148.0	0.0
112	5837620.00	29503391.0	2165301.0	211958.0	1310657.0	0.0
113	2847208.00	24422782.0	1801251.0	233199.0	1239052.0	0.0
114	4186.08	20607218.4	1544854.8	48374.4	146130.0	113701.2
115	3335.04	21638150.4	1257646.8	392599.2	418497.6	102153.6
116	3340.80	15028524.0	1684773.6	57588.0	341469.6	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
117	KTVU	88	2763.0	8968.0	172.0	226.0	1311.0	0.0	13440.0
118	KTVU	89	2709.0	8773.0	214.0	196.0	1384.0	2.0	13278.0
119	KTVU	90	2536.0	8878.0	222.0	244.0	1368.0	16.0	13264.0
120	KTVX	88	928.5	4453.5	0.0	0.0	817.5	0.0	6199.5
121	KTVX	89	798.0	4528.5	19.5	0.0	763.5	0.0	6109.5
122	KTXH	88	2557.2	9429.6	706.8	535.2	31.2	14.4	13274.4
123	KTXH	89	2470.8	9631.2	678.0	448.8	19.2	6.0	13254.0
124	KTXL	88	3019.5	8962.5	0.0	810.0	634.5	7.5	13434.0
125	KTXL	89	2944.5	9081.0	0.0	744.0	670.5	0.0	13440.0
126	KTXL	90	2595.0	9450.0	0.0	432.0	765.0	0.0	13242.0
127	KUED	89	0.0	0.0	0.0	0.0	0.0	8155.0	8155.0
128	KUHT	89	0.0	0.0	0.0	0.0	0.0	10134.0	10134.0
129	KUSA	88	472.8	3610.8	0.0	312.0	2269.2	4.8	6669.6
130	KUSA	89	181.2	4284.0	15.6	236.4	1999.2	0.0	6716.4
131	KUSA	90	40.8	3301.2	28.8	398.4	2528.4	0.0	6300.0
132	KUTV	88	330.0	2626.5	109.5	198.0	1834.5	0.0	5098.5
133	KUTV	89	313.5	2442.0	130.5	175.5	1801.5	0.0	4863.0
134	KUTV	90	288.0	2595.0	0.0	96.0	2029.5	126.0	5136.0
135	KVOS	88	2148.0	9861.6	14.4	422.4	326.4	4.8	12777.6
136	KVOS	89	2949.6	9214.8	0.0	417.6	374.4	1.2	12957.6
137	KVOS	90	2866.8	9429.6	0.0	432.0	460.8	0.0	13190.4
138	KWGN	88	3584.4	8922.0	174.0	307.2	436.8	9.6	13434.0
139	KWGN	89	3652.8	9090.0	13.2	240.0	432.0	10.8	13438.8
140	KWGN	90	3508.8	8704.8	36.0	576.0	608.4	0.0	13435.2
141	KXAS	88	97.2	2778.0	0.0	96.0	2072.4	0.0	5043.6
142	KXAS	89	28.8	2859.6	15.6	93.6	1984.8	0.0	4982.4
143	KXAS	90	112.8	3028.8	14.4	0.0	2101.2	0.0	5258.4
144	KXTV	88	643.5	2493.0	0.0	91.5	1590.0	0.0	4818.0
145	KXTV	89	630.0	3403.5	0.0	96.0	1582.5	0.0	5712.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
117	6323593.00	17625762.0	867440.0	25866.0	3022425.0	0.0
118	7298401.00	24689068.0	899365.0	21718.0	4194699.0	5775.0
119	5000101.00	16713448.0	1190316.0	14515.0	3534057.0	25976.0
120	1392.75	4476000.0	0.0	0.0	477501.0	0.0
121	1197.00	1232641.5	2398.5	0.0	225012.0	0.0
122	3068.64	3884817.6	1690166.4	14163.6	12925.2	4819.2
123	2964.96	5442204.0	999552.0	6573.6	0.0	412.8
124	4529.25	20037330.0	0.0	276141.0	760293.0	654.0
125	4416.75	21939988.5	0.0	208791.0	795060.0	0.0
126	3892.50	11161314.0	0.0	86937.0	297153.0	0.0
127	0.00	0.0	0.0	0.0	0.0	1282750.0
128	0.00	0.0	0.0	0.0	0.0	1434535.0
129	567.36	5886676.8	0.0	60524.4	4112929.2	14067.6
130	217.44	6332473.2	29031.6	70851.6	4332282.0	0.0
131	48.96	4342954.8	239122.8	106459.2	4485144.0	0.0
132	495.00	1930875.0	150777.0	14043.0	1575001.5	0.0
133	470.25	1710595.5	140413.5	25590.0	1273264.5	0.0
134	432.00	1164822.0	0.0	21885.0	1244817.0	87985.5
135	2577.60	7026639.6	9410.4	62232.0	24208.8	0.0
136	3539.52	7104795.6	0.0	66384.0	15288.0	0.0
137	3440.16	6407546.4	0.0	79820.4	23940.0	0.0
138	4301.28	12845833.2	387087.6	28891.2	651744.0	18852.0
139	4383.36	13589534.4	16172.4	46965.6	643572.0	15159.6
140	4210.56	12865022.4	82014.0	121534.8	967233.6	0.0
141	116.64	2215731.6	0.0	5208.0	1492323.6	0.0
142	34.56	1645662.0	55500.0	9158.4	1319449.2	0.0
143	135.36	1238467.2	18939.6	0.0	1086752.4	0.0
144	965.25	1648794.0	0.0	5964.0	190936.5	0.0
145	945.00	1440919.5	0.0	8799.0	282714.0	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
146	KXTX	88	2772.0	8498.4	0.0	1838.4	110.4	19.2	13238.4
147	KXTX	89	2097.6	8589.6	0.0	2366.4	153.6	0.0	13207.2
148	KXTX	90	2841.6	7996.8	0.0	2126.4	184.8	0.0	13149.6
149	KYW	88	492.0	2759.0	0.0	78.0	1692.0	2.0	5023.0
150	KYW	89	448.0	2916.0	0.0	48.0	1540.0	0.0	4952.0
151	KYW	90	327.0	3375.0	0.0	0.0	1550.0	0.0	5253.0
152	WABC	88	1359.0	1957.0	53.0	140.0	1835.0	0.0	5344.0
153	WABC	89	1488.0	2356.0	56.0	144.0	1548.0	0.0	5592.0
154	WABC	90	1204.0	2422.0	0.0	144.0	1719.0	56.0	5545.0
155	WAGA	88	262.0	4067.0	0.0	272.0	1672.0	0.0	6273.0
156	WAGA	89	97.0	4348.0	0.0	316.0	1631.0	0.0	6392.0
157	WAGA	90	12.0	4184.0	0.0	200.0	1735.0	0.0	6131.0
158	WBAL	88	360.0	3462.0	13.0	2.0	1896.0	0.0	5733.0
159	WBAL	89	275.0	3463.0	0.0	30.0	1833.0	0.0	5601.0
160	WBAL	90	172.0	3299.0	0.0	80.0	2037.0	0.0	5589.0
161	WBBM	88	121.0	2368.0	0.0	0.0	1958.0	0.0	4447.0
162	WBBM	89	41.0	2847.0	0.0	0.0	1906.0	0.0	4794.0
163	WBBM	90	54.0	2605.0	24.0	0.0	1795.0	0.0	4479.0
164	WBFF	88	3110.0	8556.0	237.0	1286.0	145.0	4.0	13338.0
165	WBFF	89	1994.0	9898.0	312.0	972.0	182.0	0.0	13358.0
166	WBFF	90	2018.0	10086.0	0.0	606.0	220.0	230.0	13160.0
167	WBNS	88	1479.0	2982.0	84.0	141.0	1719.0	3.0	6408.0
168	WBNS	89	934.5	3165.0	0.0	120.0	1564.5	0.0	5784.0
169	WBNS	90	979.5	3385.5	0.0	96.0	1488.0	0.0	5949.0
170	WBRE	88	64.5	2875.5	153.0	264.0	1405.5	6.0	4768.5
171	WBRE	89	0.0	2851.5	123.0	252.0	1341.0	0.0	4567.5
172	WBRE	90	12.0	3264.0	220.5	150.0	1221.0	0.0	4869.0
173	WBZ	88	386.0	3154.0	0.0	48.0	2096.0	0.0	5684.0
174	WBZ	89	251.0	2957.0	0.0	48.0	2094.0	0.0	5350.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
146	3326.40	12773022.0	0.0	668678.4	9873.6	0.0
147	2517.12	9679580.4	0.0	335629.2	1987.2	0.0
148	3409.92	7174130.4	0.0	449395.2	7575.6	0.0
149	177473.00	2363678.0	0.0	764.0	1052848.0	0.0
150	298822.00	2825133.0	0.0	0.0	823064.0	0.0
151	150597.00	2109115.0	0.0	0.0	1180539.0	0.0
152	67543.00	819049.0	14128.0	0.0	585112.0	0.0
153	105814.00	728626.0	7693.0	1062.0	214540.0	0.0
154	62392.00	725436.0	0.0	0.0	202109.0	18165.0
155	42339.00	1006719.0	0.0	8252.0	747193.0	0.0
156	13832.00	812598.0	0.0	12216.0	422811.0	0.0
157	2460.00	874111.0	0.0	10721.0	847207.0	0.0
158	240248.00	2675499.0	0.0	0.0	424712.0	0.0
159	152219.00	2304325.0	0.0	15549.0	354622.0	0.0
160	108361.00	1529382.0	0.0	16516.0	309274.0	0.0
161	5688.00	304618.0	0.0	0.0	175957.0	0.0
162	13388.00	775115.0	0.0	0.0	319425.0	0.0
163	0.00	348530.0	6522.0	0.0	213490.0	0.0
164	2435322.00	5236228.0	245629.0	63890.0	17998.0	0.0
165	1269540.00	6205014.0	120871.0	133827.0	37648.0	0.0
166	1288584.00	5993370.0	0.0	47952.0	19200.0	182042.0
167	2218.50	2117347.5	232836.0	4834.5	1679506.5	3204.0
168	1401.75	2206291.5	0.0	7716.0	1747314.0	0.0
169	1469.25	1762311.0	0.0	7453.5	1363492.5	0.0
170	96.75	2289679.5	88189.5	22860.0	771535.5	4911.0
171	0.00	1786186.5	72541.5	7443.0	658351.5	0.0
172	18.00	2627808.0	201409.5	22047.0	725242.5	0.0
173	133802.00	1667612.0	0.0	3094.0	1166334.0	0.0
174	154601.00	1826547.0	0.0	1244.0	1780101.0	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
175	WBZ	90	220.0	3505.0	0.0	24.0	2322.0	0.0	6072.0
176	WCAU	88	305.0	2250.0	10.0	0.0	1801.0	70.0	4436.0
177	WCAU	89	309.0	2550.0	8.0	0.0	1560.0	0.0	4427.0
178	WCAU	90	258.0	2496.0	0.0	0.0	1503.0	0.0	4258.0
179	WCBS	88	299.0	2173.0	0.0	0.0	1836.0	0.0	4308.0
180	WCBS	89	230.0	2442.0	0.0	48.0	1667.0	0.0	4387.0
181	WCBS	90	158.0	2495.0	0.0	0.0	1708.0	0.0	4362.0
182	WCCB	89	1692.0	9357.0	202.5	1872.0	141.0	0.0	13264.5
183	WCFC	89	0.0	3678.0	0.0	5110.0	4460.0	0.0	13248.0
184	WCVB	88	454.0	3399.0	134.0	138.0	2879.0	0.0	7004.0
185	WCVB	89	415.0	3641.0	84.0	138.0	2940.0	0.0	7218.0
186	WDCA	88	3618.0	7001.0	435.0	2282.0	80.0	2.0	13418.0
187	WDCA	89	1990.0	8950.0	459.0	1972.0	50.0	0.0	13421.0
188	WDCA	90	2094.0	8950.0	486.0	1760.0	88.0	30.0	13408.0
189	WDIV	90	166.0	3132.0	182.0	16.0	2267.0	0.0	5763.0
190	WDTN	88	358.5	4069.5	249.0	147.0	1590.0	0.0	6414.0
191	WDTN	89	321.0	4261.5	205.5	180.0	1629.0	0.0	6597.0
192	WDTN	90	171.0	4227.0	120.0	144.0	1714.5	0.0	6376.5
193	WENH	89	0.0	0.0	0.0	0.0	0.0	12405.0	12405.0
194	WFAA	88	492.0	3229.2	111.6	180.0	2090.4	0.0	6103.2
195	WFAA	89	288.0	3471.6	165.6	256.8	2208.0	1.2	6391.2
196	WFAA	90	58.8	3579.6	0.0	278.4	2085.6	139.2	6142.8
197	WFLD	88	1918.0	10167.0	372.0	200.0	756.0	10.0	13423.0
198	WFLD	89	2343.0	9743.0	383.0	152.0	776.0	2.0	13399.0
199	WFLD	90	1857.0	10295.0	0.0	132.0	911.0	0.0	13195.0
200	WFMJ	88	0.0	2601.0	0.0	96.0	1020.0	0.0	3717.0
201	WFMJ	89	0.0	2676.0	0.0	90.0	948.0	0.0	3714.0
202	WFMJ	90	24.0	2664.0	0.0	96.0	1083.0	0.0	3867.0
203	WFXT	88	3380.0	8828.0	10.0	110.0	250.0	3.0	12581.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
175	46086.00	1380908.0	0.0	1357.0	1928857.0	0.0
176	82689.00	1352671.0	0.0	0.0	790675.0	1408.0
177	216737.00	1562372.0	4694.0	0.0	844675.0	0.0
178	118421.00	1879904.0	0.0	0.0	692654.0	0.0
179	55489.00	490640.0	0.0	0.0	285872.0	0.0
180	72188.00	477922.0	0.0	0.0	419568.0	0.0
181	4780.00	338411.0	0.0	0.0	370160.0	0.0
182	2538.00	5325235.5	211927.5	241462.5	11955.0	0.0
183	0.00	28953.0	0.0	71288.0	29018.0	0.0
184	93123.00	1852719.0	129066.0	14834.0	1001055.0	0.0
185	46075.00	1579269.0	4349.0	15734.0	767216.0	0.0
186	3298799.00	10618202.0	698010.0	408699.0	73534.0	0.0
187	2930887.00	15679284.0	972311.0	521585.0	10755.0	0.0
188	2124689.00	9400741.0	534641.0	265045.0	26171.0	9668.0
189	81062.00	492295.0	100975.0	0.0	253200.0	0.0
190	537.75	919167.0	78136.5	15798.0	94666.5	0.0
191	481.50	1402969.5	73002.0	17874.0	77910.0	0.0
192	256.50	1158604.5	55612.5	22281.0	67707.0	0.0
193	0.00	0.0	0.0	0.0	0.0	790552.0
194	590.40	4919996.4	234680.4	73951.2	3208813.2	0.0
195	345.60	5226550.8	326354.4	66613.2	3520518.0	2648.4
196	70.56	3614360.4	0.0	129536.4	2744632.8	148398.0
197	2874107.00	14977489.0	636130.0	15650.0	367640.0	4141.0
198	3124847.00	14022797.0	559679.0	10196.0	321408.0	0.0
199	1982240.00	9698121.0	0.0	2893.0	167186.0	0.0
200	0.00	425719.5	0.0	0.0	89958.0	0.0
201	0.00	411346.5	0.0	11128.5	67468.5	0.0
202	36.00	419413.5	0.0	1779.0	48417.0	0.0
203	4489507.00	8032213.0	6520.0	18529.0	152478.0	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
204	WFXT	89	2924.0	9256.0	13.0	96.0	288.0	2.0	12579.0
205	WFXT	90	1272.0	10566.0	64.0	556.0	324.0	0.0	12782.0
206	WGBH	89	0.0	0.0	0.0	0.0	0.0	11936.0	11936.0
207	WGBS	88	3228.0	9099.0	368.0	532.0	203.0	1.0	13431.0
208	WGBS	89	2577.0	9777.0	372.0	480.0	228.0	5.0	13439.0
209	WGBS	90	1824.0	10668.0	276.0	528.0	40.0	64.0	13400.0
210	WGN	88	3412.0	7884.0	741.0	184.0	1208.0	9.0	13438.0
211	WGN	89	3237.0	7934.0	731.0	196.0	1342.0	0.0	13440.0
212	WGN	90	3212.0	7280.0	941.0	504.0	1376.0	120.0	13434.0
213	WGNO	89	2818.8	9376.8	19.2	912.0	264.0	20.4	13411.2
214	WGNX	88	4185.0	8550.0	254.0	336.0	112.0	3.0	13440.0
215	WGNX	89	3291.0	8380.0	197.0	1080.0	417.0	2.0	13367.0
216	WGNX	90	2456.0	9142.0	20.0	894.0	704.0	88.0	13304.0
217	WGRZ	88	339.0	2998.5	0.0	466.5	1462.5	0.0	5266.5
218	WGRZ	89	256.5	2976.0	0.0	441.0	1231.5	0.0	4905.0
219	WHA	89	0.0	0.0	0.0	0.0	0.0	8094.0	8094.0
220	WHIO	88	447.0	2599.5	69.0	72.0	1891.5	0.0	5079.0
221	WHIO	89	304.5	2487.0	61.5	0.0	2052.0	0.0	4905.0
222	WHIO	90	189.0	2449.5	0.0	12.0	2512.5	97.5	5260.5
223	WHMM	89	0.0	0.0	0.0	0.0	0.0	10416.0	10416.0
224	WIBW	88	166.5	2469.0	165.0	294.0	1344.0	1.5	4440.0
225	WIBW	89	117.0	2436.0	148.5	288.0	1369.5	0.0	4359.0
226	WIBW	90	34.5	3637.5	147.0	264.0	1399.5	120.0	5604.0
227	WIS	89	61.5	2503.5	112.5	207.0	1548.0	0.0	4432.5
228	WJAC	88	94.5	3091.5	0.0	357.0	1204.5	0.0	4747.5
229	WJAC	89	24.0	2803.5	36.0	336.0	1189.5	0.0	4389.0
230	WJAR	88	255.0	3168.0	0.0	48.0	1662.0	12.0	5145.0
231	WJAR	89	210.0	3148.5	0.0	48.0	1534.5	0.0	4941.0
232	WJAR	90	243.0	2976.0	0.0	24.0	1669.5	0.0	4914.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
204	4083701.00	9098854.0	0.0	18028.0	88908.0	2963
205	1591599.00	10057828.0	385610.0	75025.0	187991.0	0
206	0.00	0.0	0.0	0.0	0.0	8264818
207	2086635.00	1679451.0	283308.0	19108.0	32058.0	0
208	1151026.00	1842530.0	286480.0	2844.0	39392.0	7746
209	1062489.00	2289861.0	307617.0	42599.0	0.0	57028
210	195150497.00	343464816.0	74543875.0	858069.0	26324643.0	442581
211	202475920.00	391984522.0	87771157.0	1033023.0	31967193.0	0
212	94673881.00	230708418.0	106567656.0	644253.0	28057551.0	4876810
213	3382.56	2472076.8	6921.6	44875.2	126854.4	2322
214	3424776.00	4080018.0	196534.0	11408.0	12190.0	0
215	2798219.00	3294884.0	93142.0	65866.0	205465.0	0
216	3146433.00	5285333.0	14260.0	73778.0	488073.0	119230
217	508.50	156246.0	0.0	1020.0	75864.0	0
218	384.75	201025.5	0.0	14319.0	80302.5	0
219	0.00	0.0	0.0	0.0	0.0	1363450
220	670.50	1176727.5	6615.0	0.0	216610.5	0
221	456.75	1128397.5	19656.0	0.0	134626.5	0
222	283.50	844638.0	0.0	0.0	110742.0	39750
223	0.00	0.0	0.0	0.0	0.0	175417
224	249.75	618492.0	67708.5	12465.0	147652.5	0
225	175.50	692512.5	114259.5	1152.0	195150.0	0
226	51.75	496962.0	65020.5	6369.0	119616.0	77274
227	92.25	1380726.0	54676.5	16356.0	808372.5	0
228	141.75	385629.0	0.0	0.0	102885.0	0
229	36.00	440262.0	4194.0	3948.0	56722.5	0
230	382.50	2057890.5	0.0	0.0	177280.5	0
231	315.00	2174181.0	0.0	0.0	291298.5	0
232	364.50	2224969.5	0.0	0.0	430690.5	0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
233	WJBK	88	260.0	4335.0	0.0	192.0	1362.0	8	6157.0
234	WJBK	89	118.0	4280.0	0.0	192.0	1553.0	0	6143.0
235	WJBK	90	94.0	4314.0	0.0	192.0	1582.0	76	6258.0
236	WJZ	88	399.0	4504.0	168.0	106.0	1848.0	0	7025.0
237	WJZ	89	289.0	4656.0	97.0	92.0	1876.0	0	7010.0
238	WJZ	90	192.0	4567.0	0.0	46.0	1862.0	28	6696.0
239	WKBD	88	2484.0	8811.0	441.0	828.0	865.0	11	13440.0
240	WKBD	89	1947.0	9438.0	342.0	676.0	1027.0	6	13436.0
241	WKBD	90	1372.0	9758.0	380.0	552.0	1086.0	0	13148.0
242	WKBN	88	342.0	3417.0	81.0	180.0	1068.0	0	5088.0
243	WKBN	89	246.0	2940.0	63.0	186.0	1065.0	0	4500.0
244	WKBN	90	9.0	3435.0	75.0	111.0	1072.5	48	4750.5
245	WKEF	88	18.0	2488.5	0.0	334.5	970.5	0	3811.5
246	WKEF	89	42.0	2653.5	0.0	255.0	1029.0	0	3979.5
247	WKEF	90	12.0	3198.0	3.0	132.0	903.0	0	4248.0
248	WLNE	88	2250.0	1851.0	202.5	111.0	1329.0	3	5746.5
249	WLNE	89	2010.0	1731.0	144.0	105.0	1722.0	0	5712.0
250	WLPB	89	0.0	0.0	0.0	0.0	0.0	7013	7013.0
251	WLTV	90	1917.0	9489.0	0.0	361.0	1294.0	0	13061.0
252	WLVI	88	2174.0	9511.0	298.0	0.0	946.0	4	12933.0
253	WLVI	89	2460.0	9672.0	276.0	0.0	847.0	1	13256.0
254	WLVI	90	2873.0	9022.0	138.0	0.0	1134.0	0	13168.0
255	WMAR	88	246.0	3367.0	144.0	128.0	1604.0	4	5493.0
256	WMAR	89	177.0	3063.0	225.0	96.0	1776.0	0	5337.0
257	WMAR	90	178.0	3102.0	144.0	48.0	1894.0	124	5490.0
258	WMAV	89	0.0	0.0	0.0	0.0	0.0	6702	6702.0
259	WMTW	88	159.0	3505.5	96.0	270.0	1023.0	0	5053.5
260	WMTW	89	216.0	4078.5	39.0	264.0	1090.5	0	5688.0
261	WMTW	90	207.0	3993.0	0.0	159.0	1138.5	0	5497.5

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
233	20269.00	58983.0	0.0	0.0	15463.0	0
234	712.00	122894.0	0.0	0.0	33828.0	0
235	1082.00	127432.0	0.0	0.0	36195.0	288
236	358926.00	3247790.0	112391.0	0.0	1137037.0	0
237	134095.00	3910857.0	88124.0	3968.0	997933.0	0
238	140600.00	3224524.0	0.0	0.0	1102309.0	96589
239	6269498.00	19481603.0	2841712.0	173148.0	652358.0	39852
240	4583504.00	20977646.0	2298660.0	151159.0	997304.0	7722
241	3964215.00	18941128.0	2150745.0	68310.0	831710.0	0
242	513.00	712564.5	44071.5	1653.0	46606.5	0
243	369.00	536269.5	25713.0	3426.0	57436.5	0
244	13.50	358690.5	49305.0	3255.0	89319.0	6447
245	27.00	1359210.0	0.0	25830.0	142231.5	0
246	63.00	1146661.5	0.0	9379.5	120483.0	0
247	18.00	978493.5	3592.5	5688.0	136570.5	0
248	3375.00	680712.0	94755.0	0.0	61167.0	0
249	3015.00	843165.0	123249.0	14034.0	134604.0	0
250	0.00	0.0	0.0	0.0	0.0	333967
251	79196.00	1194731.0	0.0	1900.0	113021.0	0
252	3796362.00	9534746.0	1840297.0	0.0	898200.0	0
253	4485724.00	8131921.0	1012741.0	0.0	849091.0	1486
254	4686593.00	8379297.0	689125.0	0.0	1193720.0	0
255	161682.00	2495616.0	199257.0	27296.0	307471.0	6221
256	60046.00	2097667.0	541968.0	2990.0	419413.0	0
257	90438.00	2237627.0	192151.0	234.0	457148.0	120285
258	0.00	0.0	0.0	0.0	0.0	209820
259	238.50	511968.0	0.0	10164.0	41668.5	0
260	324.00	823462.5	12597.0	0.0	54360.0	0
261	310.50	732828.0	0.0	14073.0	57696.0	0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
262	WMUR	88	307.0	3030.0	12.0	607.0	1596.0	6.0	5558.0
263	WMUR	89	309.0	3485.0	63.0	288.0	1608.0	0.0	5753.0
264	WMUR	90	338.0	3311.0	0.0	224.0	1716.0	82.0	5671.0
265	WNBC	88	49.0	2162.0	0.0	0.0	1869.0	0.0	4080.0
266	WNBC	90	44.0	2453.0	0.0	48.0	1986.0	0.0	4532.0
267	WNEP	88	193.5	3372.0	78.0	234.0	1737.0	0.0	5614.5
268	WNEP	89	189.0	3591.0	55.5	240.0	1777.5	0.0	5853.0
269	WNEP	90	0.0	3207.0	0.0	213.0	2070.0	0.0	5490.0
270	WNET	89	0.0	0.0	0.0	0.0	0.0	13440.0	13440.0
271	WNEV	89	202.0	2102.0	0.0	110.0	2577.0	0.0	4991.0
272	WNJS	89	0.0	0.0	0.0	0.0	0.0	10677.0	10677.0
273	WNJU	88	1124.0	8026.0	0.0	3746.0	396.0	0.0	13292.0
274	WNJU	89	2250.0	7286.0	0.0	3552.0	244.0	0.0	13332.0
275	WNJU	90	1774.0	5564.0	0.0	2548.0	820.0	0.0	10706.0
276	WNUV	88	3430.0	8245.0	0.0	908.0	100.0	1.0	12684.0
277	WNYE	89	0.0	0.0	0.0	0.0	0.0	10528.0	10528.0
278	WNYW	88	2507.0	9265.0	0.0	224.0	1432.0	10.0	13438.0
279	WNYW	89	2678.0	8313.0	0.0	192.0	2257.0	0.0	13440.0
280	WNYW	90	1507.0	9052.0	0.0	182.0	2450.0	12.0	13203.0
281	WOSU	89	0.0	0.0	0.0	0.0	0.0	8050.0	8050.0
282	WPBT	89	0.0	0.0	0.0	0.0	0.0	12991.0	12991.0
283	WPGH	88	2224.0	9811.0	211.0	644.0	286.0	8.0	13184.0
284	WPGH	89	2537.0	9732.0	192.0	576.0	270.0	19.0	13326.0
285	WPGH	90	2500.0	9862.0	78.0	552.0	100.0	16.0	13108.0
286	WPHL	88	2526.0	7701.0	187.0	2679.0	264.0	7.0	13364.0
287	WPHL	89	2525.0	8024.0	308.0	2380.0	146.0	3.0	13386.0
288	WPHL	90	2305.0	8958.0	260.0	1638.0	164.0	40.0	13366.0
289	WPIX	88	3039.0	9561.0	244.0	273.0	318.0	5.0	13440.0
290	WPIX	89	2800.0	9528.0	225.0	276.0	597.0	13.0	13439.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
262	14104.00	570047.0	0.0	2372.0	204002.0	0
263	13813.00	545328.0	0.0	9196.0	432483.0	0
264	9333.00	591370.0	0.0	3846.0	473084.0	5690
265	0.00	427939.0	0.0	0.0	222994.0	0
266	0.00	351167.0	0.0	0.0	440447.0	0
267	290.25	3858262.5	20202.0	42111.0	4203045.0	0
268	283.50	4346277.0	53401.5	52266.0	5535252.0	0
269	0.00	4984071.0	0.0	85152.0	5638566.0	0
270	0.00	0.0	0.0	0.0	0.0	7797080
271	52650.00	1410976.0	0.0	0.0	664298.0	0
272	0.00	0.0	0.0	0.0	0.0	1549733
273	45100.00	1335448.0	0.0	266838.0	56254.0	0
274	326992.00	641477.0	0.0	209844.0	31318.0	0
275	23732.00	835888.0	0.0	119961.0	33871.0	0
276	954761.00	1490700.0	0.0	14884.0	2414.0	0
277	0.00	0.0	0.0	0.0	0.0	34636
278	5893497.00	18237698.0	0.0	61186.0	2495324.0	25500
279	5585105.00	17781460.0	0.0	77070.0	2893489.0	0
280	3504994.00	15284710.0	0.0	47422.0	2483132.0	0
281	0.00	0.0	0.0	0.0	0.0	960482
282	0.00	0.0	0.0	0.0	0.0	3193578
283	6373272.00	18294483.0	241014.0	179860.0	87793.0	3396
284	6999035.00	18527650.0	359382.0	174382.0	39507.0	32244
285	5725855.00	20990444.0	101173.0	130101.0	13253.0	10300
286	4282834.00	9901304.0	235585.0	917182.0	39258.0	5322
287	3715033.00	8877320.0	444550.0	390485.0	11141.0	0
288	3126877.00	9530926.0	691295.0	389899.0	10506.0	91914
289	37928774.00	62604819.0	7844047.0	376414.0	319541.0	156562
290	294769.00	63111258.0	36093727.0	63111258.0	2403505.0	248356

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
291	WPIX	90	2348.0	9610.0	250.0	156.0	1044.0	0.0	13408.0
292	WPRI	88	97.5	3498.0	93.0	282.0	1383.0	0.0	5353.5
293	WPRI	89	84.0	3657.0	39.0	288.0	1326.0	0.0	5394.0
294	WPRI	90	36.0	4122.0	0.0	192.0	1332.0	48.0	5730.0
295	WPTT	89	2408.0	9464.0	108.0	1288.0	126.0	0.0	13394.0
296	WPVI	88	1494.0	2105.0	54.0	0.0	2658.0	9.0	6320.0
297	WPVI	89	1527.0	2111.0	56.0	0.0	2749.0	0.0	6443.0
298	WPVI	90	1315.0	2182.0	0.0	0.0	2624.0	70.0	6191.0
299	WPXI	89	168.0	2977.0	0.0	220.0	1637.0	0.0	5002.0
300	WPXI	90	262.0	3100.0	20.0	288.0	2072.0	0.0	5742.0
301	WSB	88	216.0	4334.0	125.0	230.0	1924.0	2.0	6831.0
302	WSB	89	239.0	4280.0	165.0	216.0	2029.0	0.0	6929.0
303	WSB	90	104.0	3991.0	0.0	262.0	2084.0	148.0	6589.0
304	WSBK	88	2332.0	9565.0	656.0	144.0	582.0	44.0	13323.0
305	WSBK	89	2430.0	9720.0	587.0	148.0	520.0	5.0	13410.0
306	WSBK	90	2372.0	9763.0	632.0	150.0	358.0	60.0	13336.0
307	WSTM	88	168.0	3231.0	0.0	144.0	1108.5	12.0	4663.5
308	WSTM	89	70.5	3117.0	0.0	135.0	1090.5	0.0	4413.0
309	WSVN	89	1417.0	7349.0	255.0	288.0	4128.0	1.0	13438.0
310	WSYX	88	291.0	4408.5	79.5	168.0	921.0	0.0	5868.0
311	WSYX	89	216.0	4549.5	172.5	240.0	912.0	0.0	6090.0
312	WTBS	88	4757.0	6810.0	1130.0	304.0	438.0	1.0	13440.0
313	WTBS	89	5072.0	6754.0	907.0	212.0	494.0	0.0	13439.0
314	WTBS	90	5025.0	6899.0	482.0	144.0	740.0	100.0	13392.0
315	WTIC	88	2555.0	7223.0	123.0	748.0	114.0	7.0	10770.0
316	WTOG	88	3418.5	9001.5	61.5	81.0	735.0	9.0	13306.5
317	WTOG	89	3610.5	8610.0	144.0	516.0	442.5	15.0	13338.0
318	WTOG	90	2910.0	9099.0	96.0	636.0	564.0	0.0	13305.0
319	WTOV	89	24.0	2998.5	48.0	436.5	885.0	0.0	4392.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
291	28351795.00	54049604.0	4389318.0	81278.0	3082368.0	0.0
292	146.25	1910667.0	9294.0	23322.0	101607.0	0.0
293	126.00	2208097.5	43165.5	23298.0	149911.5	0.0
294	54.00	2341102.5	0.0	18343.5	233986.5	61809.0
295	1843019.00	5582874.0	54888.0	125158.0	23676.0	0.0
296	595515.00	945419.0	57732.0	0.0	482114.0	0.0
297	561332.00	956865.0	64589.0	0.0	837410.0	0.0
298	326690.00	795373.0	0.0	0.0	612633.0	12722.0
299	79212.00	3069390.0	0.0	38248.0	785704.0	0.0
300	59460.00	2738425.0	34627.0	33539.0	730488.0	0.0
301	46658.00	3092639.0	23313.0	20156.0	1389445.0	1103.0
302	51642.00	3262276.0	25617.0	13768.0	1122696.0	0.0
303	4030.00	2204337.0	0.0	29305.0	927186.0	103923.0
304	17601425.00	30314127.0	8129060.0	37082.0	452919.0	306219.0
305	15713198.00	36436396.0	6842680.0	17236.0	578630.0	28558.0
306	12359582.00	31633882.0	9382154.0	68539.0	879249.0	128791.0
307	252.00	293787.0	0.0	570.0	95769.0	0.0
308	105.75	361512.0	0.0	0.0	131086.5	0.0
309	0.00	23814.0	0.0	0.0	1584.0	0.0
310	436.50	1931956.5	97882.5	19278.0	354766.5	0.0
311	324.00	2456004.0	166339.5	52086.0	420103.5	0.0
312	649981064.00	739458989.0	251319080.0	2043281.0	62439032.0	73411.0
313	655378149.00	735122393.0	225149364.0	1715609.0	61409072.0	0.0
314	642733668.00	805362824.0	72695525.0	853582.0	28999903.0	15439619.0
315	1736114.00	4660096.0	384600.0	107351.0	3642.0	14446.0
316	5127.75	3424291.5	67324.5	10317.0	116907.0	0.0
317	5415.75	3566349.0	117061.5	13113.0	87445.5	0.0
318	4365.00	4386645.0	68577.0	16822.5	122527.5	0.0
319	36.00	423687.0	0.0	13786.5	26652.0	0.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
320	WTRF	88	166.5	2265.0	96.0	672.0	1366.5	1.5	4567.5
321	WTRF	89	42.0	2331.0	67.5	475.5	1318.5	0.0	4234.5
322	WTTG	88	2356.0	9738.0	146.0	336.0	857.0	3.0	13436.0
323	WTTG	89	1885.0	9528.0	69.0	260.0	1698.0	0.0	13440.0
324	WTTG	90	1760.0	8902.0	54.0	228.0	2200.0	40.0	13184.0
325	WTTV	88	2462.4	6350.4	385.2	616.8	925.2	4.8	10744.8
326	WTTV	89	3031.2	7908.0	342.0	955.2	1168.8	0.0	13405.2
327	WTTV	90	2870.4	8160.0	62.4	607.2	788.4	192.0	12680.4
328	WTTW	89	0.0	0.0	0.0	0.0	0.0	13418.0	13418.0
329	WTVS	89	0.0	0.0	0.0	0.0	0.0	13409.0	13409.0
330	WTXF	88	2092.0	9781.0	353.0	446.0	511.0	7.0	13190.0
331	WTXF	89	1670.0	10250.0	320.0	518.0	435.0	11.0	13204.0
332	WTXF	90	992.0	10503.0	357.0	646.0	584.0	12.0	13095.0
333	WTXX	89	3522.0	8985.6	156.0	184.8	432.0	30.0	13310.4
334	WUAB	88	2833.0	8554.0	298.0	658.0	702.0	34.0	13079.0
335	WUAB	89	2971.0	8410.0	264.0	540.0	947.0	24.0	13156.0
336	WUAB	90	3330.0	8314.0	204.0	430.0	770.0	0.0	13048.0
337	WVIA	89	0.0	0.0	0.0	0.0	0.0	8803.0	8803.0
338	WVIT	88	57.6	2822.4	184.8	182.4	1237.2	0.0	4484.4
339	WVIT	89	9.6	2882.4	165.6	182.4	1131.6	0.0	4371.6
340	WVIT	90	38.4	3092.4	214.8	266.4	987.6	0.0	4599.6
341	WVTM	90	226.0	2218.0	16.0	0.0	952.0	0.0	3412.0
342	WVTV	88	4662.0	7493.0	451.0	240.0	159.0	4.0	13009.0
343	WVTV	90	3864.0	8750.0	0.0	4.0	662.0	164.0	13444.0
344	WWLP	88	144.0	2349.0	160.5	144.0	1561.5	3.0	4362.0
345	WWLP	89	192.0	2422.5	0.0	141.0	1522.5	0.0	4278.0
346	WWLP	90	192.0	2397.0	0.0	147.0	1578.0	60.0	4374.0
347	WWOR	88	680.0	10324.0	613.0	0.0	1819.0	3.0	13439.0
348	WWOR	89	640.0	9693.0	516.0	32.0	2551.0	8.0	13440.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
320	249.75	1113832.5	28816.5	65880.0	93915.0	0.0
321	63.00	824433.0	33423.0	26839.5	167884.5	0.0
322	5320732.00	17477417.0	320327.0	60714.0	1692065.0	195.0
323	3986372.00	22180961.0	245665.0	67202.0	1936363.0	0.0
324	1308769.00	7498665.0	54387.0	28084.0	723999.0	14864.0
325	2954.88	4311216.0	724875.6	99328.8	187252.8	0.0
326	3637.44	3479094.0	575166.0	35263.2	179870.4	0.0
327	3444.48	2156391.6	25196.4	31152.0	161558.4	270410.4
328	0.00	0.0	0.0	0.0	0.0	11393666.0
329	0.00	0.0	0.0	0.0	0.0	1453831.0
330	7477759.00	31853454.0	2431482.0	96768.0	628112.0	16190.0
331	4050456.00	29714318.0	2011067.0	72809.0	713747.0	37098.0
332	1949375.00	19235769.0	1444580.0	58340.0	673131.0	0.0
333	4226.40	6778411.2	75181.2	44584.8	18530.4	59997.6
334	6627092.00	21869698.0	1425938.0	372441.0	595725.0	60335.0
335	6477440.00	19594707.0	1596032.0	189366.0	892984.0	72742.0
336	7268896.00	19418416.0	1444893.0	290353.0	1144385.0	0.0
337	0.00	0.0	0.0	0.0	0.0	2442293.0
338	69.12	1223864.4	113806.8	25636.8	338217.6	0.0
339	11.52	1870953.6	319957.2	18715.2	521686.8	0.0
340	46.08	2319966.0	202616.4	92095.2	447835.2	0.0
341	18788.00	246253.0	0.0	0.0	219000.0	0.0
342	2867225.00	4307561.0	1024090.0	36858.0	14171.0	8438.0
343	1084081.00	1468641.0	0.0	0.0	54290.0	26620.0
344	216.00	848488.5	9306.0	0.0	410283.0	0.0
345	288.00	916597.5	0.0	3117.0	563632.5	0.0
346	288.00	815032.5	0.0	0.0	445728.0	16065.0
347	22981330.00	269852026.0	23837456.0	0.0	21942962.0	48565.0
348	20522725.00	239342070.0	21425825.0	27286.0	30886476.0	220407.0

OBS	STATION	YEAR	MOVIES	SERIES	SPORTS	DEVO	LOCAL	OTHER	TOTAL
349	WWOR	90	824.0	9116.0	380.0	48.0	2984.0	32.0	13384.0
350	WWSB	88	610.0	3258.0	0.0	132.0	1090.0	0.0	5090.0
351	WWSB	89	546.0	3124.0	0.0	192.0	990.0	0.0	4852.0
352	WWSB	90	424.0	4304.0	0.0	140.0	1332.0	0.0	6200.0
353	WXIA	88	55.0	2693.0	128.0	174.0	2230.0	6.0	5286.0
354	WXIA	89	21.0	3026.0	147.0	176.0	1942.0	0.0	5312.0
355	WXIA	90	172.0	2950.0	0.0	144.0	2468.0	128.0	5862.0
356	WXIX	88	2778.0	10248.0	64.0	200.0	68.0	0.0	13358.0
357	WXIX	89	2372.0	10649.0	85.0	194.0	62.0	0.0	13362.0
358	WXIX	90	2222.0	10568.0	0.0	182.0	60.0	116.0	13148.0
359	WXTV	88	1490.0	10273.0	0.0	300.0	638.0	0.0	12701.0
360	WXTV	89	1665.0	10203.0	0.0	48.0	554.0	0.0	12470.0
361	WXYZ	88	639.0	3464.0	112.0	48.0	2196.0	0.0	6459.0
362	WXYZ	89	508.0	3830.0	63.0	48.0	2144.0	0.0	6593.0
363	WXYZ	90	498.0	3916.0	0.0	48.0	2007.0	64.0	6533.0
364	WYOU	89	166.5	2467.5	0.0	288.0	1521.0	0.0	4443.0
365	WYOU	90	28.5	2439.0	0.0	168.0	1734.0	0.0	4372.5
366	WYTV	88	48.0	2445.0	29.0	596.0	680.0	0.0	3798.0

OBS	VMOVIES	VSERIES	VSPORTS	VDEVO	VLOCAL	VOTHER
349	12584288.00	127635128.0	15687714.0	52904.0	19008508.0	549172.0
350	1220.00	1889326.0	0.0	10536.0	254548.0	0.0
351	1092.00	1754390.0	0.0	0.0	186890.0	0.0
352	848.00	1740696.0	0.0	0.0	182972.0	0.0
353	37898.00	1371522.0	65579.0	20122.0	1612583.0	0.0
354	928.00	1919805.0	25317.0	69790.0	1110712.0	0.0
355	36345.00	1627796.0	0.0	24675.0	1557719.0	61856.0
356	4566539.00	11645332.0	71383.0	49780.0	17191.0	0.0
357	3618995.00	12068154.0	53354.0	30388.0	2950.0	0.0
358	3152549.00	12241988.0	0.0	17031.0	19568.0	49084.0
359	49152.00	1094746.0	0.0	1492.0	68112.0	0.0
360	35794.00	965620.0	0.0	0.0	27144.0	0.0
361	19202.00	799541.0	234405.0	0.0	747984.0	0.0
362	31319.00	566474.0	20550.0	0.0	391762.0	0.0
363	11422.00	547559.0	0.0	1228.0	628120.0	822.0
364	249.75	2130465.0	0.0	3930.0	1094508.0	0.0
365	42.75	1827340.5	0.0	10833.0	1000930.5	0.0
366	13657.00	684960.0	6612.0	27938.0	18619.0	0.0

NAB 1990 EXHIBIT 43-X

CDCHNG1.XLS

SYS_ID	CALL_REP	CALLSIGN	CAL	CHNL	ST	ST1	871	872	881	882	891	892	901	902	911	912
ALJ400	W55BJ	JASPER	AL	55	L	P	*	*	*	*	*	L	*	*	*	*
ALJ400	WBIQ	BIRMINGHAM	AL	10	E		L	L	L	L	L	L	L	L	L	L
ALJ400	WBMG	BIRMINGHAM	AL	42	N	C	L	L	L	L	L	L	L	L	L	L
ALJ400	WBRC	BIRMINGHAM	AL	06	N	A	L	L	L	L	L	L	L	L	L	L
ALJ400	WDBB	TUSCALOOSA	AL	17	I	F	L	L	L	L	L	L	L	L	L	*
ALJ400	WGN	CHICAGO	IL	09	I		D	D	D	D	D	D	D	D	D	D
ALJ400	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
ALJ400	WTTO	BIRMINGHAM	AL	21	I	F	L	L	L	L	L	L	L	L	L	L
ALJ400	WVTM	BIRMINGHAM	AL	13	N	N	L	L	L	L	L	L	L	L	L	L
ALJ400	WWOR	NEW YORK	NY	09	I		D	D	D	D	D	D	*	*	*	*
ARR300	KAFT	FAYETTEVILLE	AR	13	E		L	L	L	L	L	L	L	L	L	L
ARR300	KFAA	ROGERS	AR	51	N	N	*	*	*	*	*	*	L	L	L	L
ARR300	KFSM	FT SMITH	AR	05	N	C	L	L	L	L	L	L	L	L	L	L
ARR300	KHOG	FAYETTEVILLE	AR	29	N	A	L	L	L	L	L	L	L	L	L	L
ARR300	KOAM	PITTSBURG	KS	07	N	C	L	L	L	L	L	L	L	L	L	L
ARR300	KODE	JOPLIN	MO	12	N	A	L	L	L	L	L	L	*	*	*	*
ARR300	KPOM	FT SMITH	AR	24	N	N	L	L	L	L	L	L	*	*	*	*
ARR300	KSNF	JOPLIN	MO	16	N	N	L	L	L	L	L	L	L	L	L	L
ARR300	KTUL	TULSA	OK	08	N	A	L	L	L	L	L	L	L	L	L	L
ARR300	WGN	CHICAGO	IL	09	I		*	*	*	*	*	*	D	D	D	D
ARR300	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
AZT960	KGUN	TUCSON	AZ	09	N	A	L	L	L	L	L	L	L	L	L	L
AZT960	KMSB	TUCSON	AZ	11	I	F	L	L	L	L	L	L	L	L	L	L
AZT960	KOLD	TUCSON	AZ	13	N	C	L	L	L	L	L	L	L	L	L	L
AZT960	KPOL	TUCSON	AZ	40	I		L	L	L	L	L	L	*	*	*	*
AZT960	KTLA	LOS ANGELES	CA	05	I		D	D	D	D	D	D	D	*	*	*
AZT960	KTTU	TUCSON	AZ	18	I		L	L	L	L	L	L	L	L	L	L
AZT960	KTTV	LOS ANGELES	CA	11	I	F	D	D	D	D	D	D	D	*	*	*
AZT960	KTVW	PHOENIX	AZ	33	I	S	L	L	L	L	L	L	L	L	L	L
AZT960	KUAT	TUCSON	AZ	06	E		L	L	L	L	L	L	L	L	L	L
AZT960	KVOA	TUCSON	AZ	04	N	N	L	L	L	L	L	L	L	L	L	L
AZT960	WGN	CHICAGO	IL	09	I		D	D	D	D	D	D	D	D	D	D
AZT960	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
AZT960	WWOR	NEW YORK	NY	09	I		D	D	D	D	D	D	D	*	*	*
CAA720	KCRA	SACRAMENTO	CA	03	N	N	L	L	L	L	L	L	L	L	L	L
CAA720	KCSO	MODESTO	CA	19	I	S	L	L	L	L	L	L	L	L	L	L
CAA720	KICU	SAN JOSE	CA	36	I		D	D	D	D	L	*	*	*	*	*
CAA720	KOVR	STOCKTON	CA	13	N	A	L	L	L	L	L	L	L	L	L	L
CAA720	KRBK	SACRAMENTO	CA	31	I		L	L	L	L	L	L	L	L	L	L
CAA720	KSCH	STOCKTON-SACRA	CA	58	I		*	*	*	*	*	L	L	L	L	L
CAA720	KTVU	OAKLAND	CA	02	I	F	D	D	D	D	L	*	*	*	*	*
CAA720	KTXL	SACRAMENTO	CA	40	I	F	L	L	L	L	L	L	L	L	L	L
CAA720	KVIE	SACRAMENTO	CA	06	E		L	L	L	L	L	L	L	L	L	L
CAA720	KXTV	SACRAMENTO	CA	10	N	C	L	L	L	L	L	L	L	L	L	L
CAA720	WTBS	ATLANTA	GA	17	I		D	D	D	D	L	L	D	D	D	D

CAA780	KABC	LOS ANGELES	CA	07	N	A	D	D	D	D	D	D	D	D	D	D
CAA780	KBAK	BAKERSFIELD	CA	29	N	A	L	L	L	L	L	L	L	L	L	L
CAA780	KCAL	LOS ANGELES	CA	09	I		D	D	D	D	D	D	D	D	D	D
CAA780	KCET	LOS ANGELES	CA	28	E		D	D	D	D	D	D	D	D	D	D
CAA780	KCOP	LOS ANGELES	CA	13	I		D	D	D	D	D	D	D	*	*	*
CAA780	KDOB	BAKERSFIELD	CA	45	I		*	*	*	*	L	L	L	L	L	L
CAA780	KERO	BAKERSFIELD	CA	23	N	C	L	L	L	L	L	L	L	L	L	L
CAA780	KGET	BAKERSFIELD	CA	17	N	C	L	L	L	L	L	L	L	L	L	L
CAA780	KMPH	VISALIA	CA	26	I	F	L	L	L	L	L	L	L	L	L	L
CAA780	KNSD	SAN DIEGO	CA	39	N	N	L	*	*	*	*	*	*	*	*	*
CAA780	KTLA	LOS ANGELES	CA	05	I		D	D	D	D	D	D	D	D	D	D
CAA780	KTTV	LOS ANGELES	CA	11	I	F	D	D	D	D	D	D	D	D	D	D
CAA780	WTBS	ATLANTA	GA	17	I		*	*	*	*	*	*	*	D	D	D
CAA810	KCAL	LOS ANGELES	CA	09	I		D	L	D	D	D	D	D	D	D	D
CAA810	KCET	LOS ANGELES	CA	28	E		*	*	*	D	*	*	*	D	D	D
CAA810	KCOY	SANTA MARIA	CA	12	N	C	L	L	L	L	L	L	L	L	L	L
CAA810	KEYT	SANTA BARBARA	CA	03	N	A	L	L	L	L	L	L	L	L	L	L
CAA810	KQED	SAN FRANCISCO	CA	09	E		D	L	D	*	*	*	*	*	*	*
CAA810	KSBY	SAN LUIS OBISPO	CA	06	N	N	L	L	L	L	L	L	L	L	L	L
CAA810	KTLA	LOS ANGELES	CA	05	I		D	L	D	D	D	D	D	D	D	D
CAA810	KTTV	LOS ANGELES	CA	11	I	F	D	L	D	D	D	D	D	D	D	D
CAA810	KTVU	OAKLAND	CA	02	I	F	*	*	*	*	D	D	D	*	*	*
CAA810	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAB060	KABC	LOS ANGELES	CA	07	N	A	D	D	D	D	D	D	D	D	D	D
CAB060	KBAK	BAKERSFIELD	CA	29	N	A	L	L	L	L	L	L	L	L	L	L
CAB060	KCAL	LOS ANGELES	CA	09	I		D	D	D	D	D	D	D	D	D	D
CAB060	KCBS	LOS ANGELES	CA	02	N	C	D	D	D	D	D	*	*	*	*	*
CAB060	KCET	LOS ANGELES	CA	28	E		D	D	D	D	D	D	D	D	D	D
CAB060	KCOP	LOS ANGELES	CA	13	I		D	D	D	D	D	*	*	*	*	*
CAB060	KDOB	BAKERSFIELD	CA	45	I		*	*	*	*	L	L	L	L	L	L
CAB060	KERO	BAKERSFIELD	CA	23	N	C	L	L	L	L	L	L	L	L	L	L
CAB060	KGET	BAKERSFIELD	CA	17	N	C	L	L	L	L	L	L	L	L	L	L
CAB060	KMEX	LOS ANGELES	CA	34	I	S	*	*	*	*	*	*	L	L	L	L
CAB060	KMPH	VISALIA	CA	26	I	F	L	L	L	L	L	L	L	L	L	L
CAB060	KNBC	LOS ANGELES	CA	04	N	N	D	D	D	D	D	D	D	D	D	D
CAB060	KNSD	SAN DIEGO	CA	39	N	N	L	L	L	L	L	L	*	*	*	*
CAB060	KTLA	LOS ANGELES	CA	05	I		D	D	D	D	D	D	D	D	D	D
CAB060	KTTV	LOS ANGELES	CA	11	I	F	D	D	D	D	D	D	D	D	D	D
CAB310	KCOP	LOS ANGELES	CA	13	I		L	L	L	L	L	L	L	L	L	L
CAB310	KFMB	SAN DIEGO	CA	08	N	C	L	L	L	L	L	L	L	L	L	L
CAB310	KGTV	SAN DIEGO	CA	10	N	A	L	L	L	L	L	L	L	L	L	L
CAB310	KHAS	HASTINGS	NE	05	N	N	*	*	*	*	*	*	*	*	L	L
CAB310	KMEX	LOS ANGELES	CA	34	I	S	D	D	D	D	*	*	*	*	*	*
CAB310	KNBC	LOS ANGELES	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAB310	KNSD	SAN DIEGO	CA	39	N	N	L	L	L	L	L	L	L	L	L	L
CAB310	KPBS	SAN DIEGO	CA	15	E		L	L	L	L	L	L	L	L	L	L
CAB310	KSCI	SAN BERNARDINO	CA	18	I	S	L	L	L	L	L	L	L	L	L	L
CAB310	KTLA	LOS ANGELES	CA	05	I		D	D	D	D	D	D	D	D	D	D
CAB310	KTTV	LOS ANGELES	CA	11	I	F	D	D	D	D	D	D	D	D	*	*
CAB310	KTTY	SAN DIEGO	CA	69	I		L	L	L	L	L	L	L	L	L	L

CAB310	KUSI	SAN DIEGO	CA	51	I		L	L	L	L	L	L	L	L	L	L
CAB310	WGN	CHICAGO	IL	09	I		*	*	*	*	*	*	*	*	D	D
CAB310	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAB310	XETV	TIAJUANA	BJ	06	I		L	L	L	L	L	L	L	L	L	L
CAB310	XEWT	TIAJUANA	BJ	12	I		*	*	*	*	L	L	L	L	L	L
CAC350	KCRA	SACRAMENTO	CA	03	N	N	L	L	L	L	L	L	L	L	L	L
CAC350	KCSO	MODESTO	CA	19	I	S	L	L	L	L	L	L	L	L	L	L
CAC350	KOVR	STOCKTON	CA	13	N	A	L	L	L	L	L	L	L	L	L	L
CAC350	KRBK	SACRAMENTO	CA	31	I		L	L	L	L	L	L	L	L	L	L
CAC350	KSCH	STOCKTON-SACRA	CA	58	I		*	L	L	L	L	L	L	L	L	L
CAC350	KTVU	OAKLAND	CA	02	I	F	D	D	D	D	D	D	*	*	*	*
CAC350	KTXL	SACRAMENTO	CA	40	I	F	L	L	L	L	L	L	L	L	L	L
CAC350	KVIE	SACRAMENTO	CA	06	E		L	L	L	L	L	L	L	L	L	L
CAC350	KXTV	SACRAMENTO	CA	10	N	C	L	L	L	L	L	L	L	L	L	L
CAC350	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAC370	KBHK	SAN FRANCISCO	CA	44	I		D	D	D	D	D	D	D	D	D	D
CAC370	KCPM	CHICO	CA	24	N	N	L	L	L	L	L	L	L	L	L	L
CAC370	KCRA	SACRAMENTO	CA	03	N	N	D	D	D	D	D	D	D	D	D	D
CAC370	KHSL	CHICO	CA	12	N	C	L	L	L	L	L	L	L	L	L	L
CAC370	KIXE	REDDING	CA	09	E		L	L	L	L	L	L	L	L	L	L
CAC370	KOVR	STOCKTON	CA	13	N	A	D	D	D	D	D	*	*	*	*	*
CAC370	KPIX	SAN FRANCISCO	CA	05	N	C	D	D	D	D	D	D	D	D	D	D
CAC370	KRCR	REDDING	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAC370	KRON	SAN FRANCISCO	CA	04	N	N	D	D	D	D	D	*	*	*	*	*
CAC370	KTVU	OAKLAND	CA	02	I	F	D	D	D	D	D	D	D	D	D	D
CAC370	KTXL	SACRAMENTO	CA	40	I	F	D	D	D	D	D	D	D	D	D	D
CAC370	KXTV	SACRAMENTO	CA	10	N	C	D	D	D	D	D	*	*	*	*	*
CAC370	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAC640	KABC	LOS ANGELES	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAC640	KCAL	LOS ANGELES	CA	09	I		L	L	L	L	L	L	L	L	L	L
CAC640	KCBS	LOS ANGELES	CA	02	N	C	L	L	L	L	L	L	L	L	L	L
CAC640	KCET	LOS ANGELES	CA	28	E		L	L	L	L	L	L	L	L	L	L
CAC640	KCOP	LOS ANGELES	CA	13	I		L	L	L	L	L	L	L	L	L	L
CAC640	KLCS	LOS ANGELES	CA	58	E		L	L	*	*	*	*	*	*	*	*
CAC640	KMEX	LOS ANGELES	CA	34	I	S	L	L	L	L	L	L	L	L	L	L
CAC640	KNBC	LOS ANGELES	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAC640	KSCI	SAN BERNARDINO	CA	18	I	S	L	L	L	L	L	L	*	*	*	*
CAC640	KTLA	LOS ANGELES	CA	05	I		L	L	L	L	L	L	L	L	L	L
CAC640	KTTV	LOS ANGELES	CA	11	I	F	L	L	L	L	L	L	L	L	L	L
CAC640	KVCR	SAN BERNARDINO	CA	24	E		L	L	L	L	L	L	L	L	L	*
CAC640	KWHY	LOS ANGELES	CA	22	I	S	*	*	*	L	L	L	L	L	*	*
CAC640	WGN	CHICAGO	IL	09	I		D	D	D	D	D	D	*	*	*	*
CAC640	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAC670	KABC	LOS ANGELES	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAC670	KCAL	LOS ANGELES	CA	09	I		L	L	L	L	L	L	L	L	L	L
CAC670	KCBS	LOS ANGELES	CA	02	N	C	L	L	L	L	L	L	L	L	L	L
CAC670	KCET	LOS ANGELES	CA	28	E		L	L	L	L	L	L	L	L	L	L
CAC670	KCOP	LOS ANGELES	CA	13	I		L	L	L	L	L	L	L	L	L	L

CAC670	KDOC	ANAHEIM	CA	56	I		L	L	L	L	L	L	L	L	L	L
CAC670	KHSC	ONTARIO	CA	46	I		L	*	*	*	*	*	L	L	L	L
CAC670	KLCS	LOS ANGELES	CA	58	E		L	L	L	L	L	L	L	L	L	L
CAC670	KMEX	LOS ANGELES	CA	34	I	S	L	L	L	L	L	L	L	L	L	L
CAC670	KNBC	LOS ANGELES	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAC670	KOCE	HUNTINGTON BEAC	CA	50	E		L	L	L	L	L	L	L	L	L	L
CAC670	KSCI	SAN BERNARDINO	CA	18	I	S	L	L	L	L	L	L	L	L	L	L
CAC670	KTBN	SANTA ANA	CA	40	I	S	L	L	L	L	L	L	L	L	L	L
CAC670	KTLA	LOS ANGELES	CA	05	I		L	L	L	L	L	L	L	L	L	L
CAC670	KTTV	LOS ANGELES	CA	11	I	F	L	L	L	L	L	L	L	L	L	L
CAC670	KVEA	LOS ANGELES-COR	CA	52	I		L	L	L	L	L	L	L	L	L	L
CAC670	KWHY	LOS ANGELES	CA	22	I	S	*	L	L	L	L	L	L	L	L	L
CAC670	WGN	CHICAGO	IL	09	I		D	D	D	D	D	D	D	D	D	D
CAC670	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAC670	WWOR	NEW YORK	NY	09	I		D	D	D	L	L	L	*	*	*	*
CAC770	KAGL	SAN BERNARDINO	CA	30	I		L	L	L	L	L	L	L	L	L	L
CAC770	KCAL	LOS ANGELES	CA	09	I		L	L	L	L	L	L	L	L	L	L
CAC770	KCBS	LOS ANGELES	CA	02	N	C	L	L	L	L	L	L	L	L	L	L
CAC770	KCET	LOS ANGELES	CA	28	E		L	L	L	L	L	L	L	L	L	L
CAC770	KCOP	LOS ANGELES	CA	13	I		L	L	L	L	L	L	L	L	L	L
CAC770	KDOC	ANAHEIM	CA	56	I		L	L	L	L	L	L	L	L	L	L
CAC770	KHSC	ONTARIO	CA	46	I		L	L	L	L	L	L	L	L	L	L
CAC770	KLCS	LOS ANGELES	CA	58	E		L	L	L	L	L	L	L	L	L	L
CAC770	KMEX	LOS ANGELES	CA	34	I	S	L	L	L	L	L	L	L	L	L	L
CAC770	KNBC	LOS ANGELES	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAC770	KOCE	HUNTINGTON BEAC	CA	50	E		L	L	L	L	L	L	L	L	L	L
CAC770	KSCI	SAN BERNARDINO	CA	18	I	S	L	L	L	L	L	L	L	L	L	L
CAC770	KTBN	SANTA ANA	CA	40	I	S	L	L	L	L	L	L	L	L	L	L
CAC770	KTLA	LOS ANGELES	CA	05	I		L	L	L	L	L	L	L	L	L	L
CAC770	KTTV	LOS ANGELES	CA	11	I	F	L	L	L	L	L	L	L	L	L	L
CAC770	KVCR	SAN BERNARDINO	CA	24	E		L	L	L	L	L	L	L	L	L	L
CAC770	KVEA	LOS ANGELES-COR	CA	52	I		L	L	L	L	L	L	L	L	L	L
CAC770	KWHY	LOS ANGELES	CA	22	I	S	L	L	L	L	L	L	L	L	L	L
CAC770	WGN	CHICAGO	IL	09	I		*	*	*	*	*	*	*	D	D	D
CAC770	WPIX	NEW YORK	NY	11	I		D	D	D	D	D	D	D	*	*	*
CAC770	WTBS	ATLANTA	GA	17	I		*	*	*	*	*	D	D	D	D	D
CAC770	WWOR	NEW YORK	NY	09	I		D	D	D	D	D	*	*	*	*	*
CAC880	KBHK	SAN FRANCISCO	CA	44	I		L	L	*	*	*	*	L	L	L	L
CAC880	KCRA	SACRAMENTO	CA	03	N	N	D	D	D	D	D	D	D	D	*	*
CAC880	KCSM	SAN MATEO	CA	60	E		L	L	L	L	L	L	L	*	*	*
CAC880	KDTV	SAN FRANCISCO	CA	14	I	S	L	L	L	L	L	L	L	L	L	L
CAC880	KFCB	CONCORD	CA	42	I		L	*	*	*	*	*	*	*	*	*
CAC880	KGO	SAN FRANCISCO	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAC880	KICU	SAN JOSE	CA	36	I		L	L	L	L	L	L	L	L	L	L
CAC880	KMTP	SAN FRANCISCO	CA	32	E		*	*	*	*	*	*	*	*	*	L
CAC880	KNTV	SAN JOSE	CA	11	N	A	L	*	*	*	*	*	*	*	*	*
CAC880	KOFY	SAN FRANSISCO	CA	20	I		L	L	L	L	L	L	L	L	L	L
CAC880	KPIX	SAN FRANCISCO	CA	05	N	C	L	L	L	L	L	L	L	L	L	L
CAC880	KQEC	SAN FRANCISCO	CA	32	E		L	L	L	L	L	L	L	L	L	*
CAC880	KQED	SAN FRANCISCO	CA	09	E		L	L	L	L	L	L	L	L	L	L
CAC880	KRCB	COTATI	CA	22	E		*	*	*	*	*	*	*	L	L	L
CAC880	KRON	SAN FRANCISCO	CA	04	N	N	L	L	L	L	L	L	L	L	L	L

CAC880	KTEH	SAN JOSE	CA	54	E		L	L	L	L	L	L	L	L	L	L
CAC880	KTSF	SAN FRANCISCO	CA	26	I	S	L	L	L	L	L	L	L	L	L	L
CAC880	KTVU	OAKLAND	CA	02	I	F	L	L	L	L	L	L	L	L	L	L
CAC880	KTXL	SACRAMENTO	CA	40	I	F	L	D	D	D	D	D	D	*	*	*
CAC880	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAC940	KABC	LOS ANGELES	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAC940	KAGL	SAN BERNARDINO	CA	30	I		L	*	*	*	*	*	*	*	*	*
CAC940	KCAL	LOS ANGELES	CA	09	I		L	L	L	L	L	L	L	L	L	L
CAC940	KCBS	LOS ANGELES	CA	02	N	C	L	L	L	L	L	L	L	L	L	L
CAC940	KCET	LOS ANGELES	CA	28	E		L	L	L	L	L	L	L	L	L	L
CAC940	KCOP	LOS ANGELES	CA	13	I		L	L	L	L	L	L	L	L	L	L
CAC940	KDOC	ANAHEIM	CA	56	I		L	L	L	L	L	L	L	L	L	L
CAC940	KLCS	LOS ANGELES	CA	58	E		L	L	L	L	L	L	L	L	L	L
CAC940	KMEX	LOS ANGELES	CA	34	I	S	L	L	L	L	L	L	L	L	L	L
CAC940	KNBC	LOS ANGELES	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAC940	KOCE	HUNTINGTON BEAC	CA	50	E		L	L	L	L	L	L	L	L	L	L
CAC940	KSCI	SAN BERNARDINO	CA	18	I	S	L	L	L	L	L	L	L	L	L	L
CAC940	KTBN	SANTA ANA	CA	40	I	S	L	L	L	L	L	L	L	L	L	L
CAC940	KTLA	LOS ANGELES	CA	05	I		L	L	L	L	L	L	L	L	L	L
CAC940	KTTV	LOS ANGELES	CA	11	I	F	L	L	L	L	L	L	L	L	L	L
CAC940	KVCR	SAN BERNARDINO	CA	24	E		L	L	L	L	L	L	L	L	L	L
CAC940	KWHY	LOS ANGELES	CA	22	I	S	L	L	L	L	L	L	L	L	L	L
CAC940	WGN	CHICAGO	IL	09	I		*	*	*	*	*	*	*	*	D	D
CAC940	WPIX	NEW YORK	NY	11	I		D	D	D	D	D	D	D	D	*	*
CAC940	WTBS	ATLANTA	GA	17	I		*	*	*	*	*	D	D	D	D	D
CAC940	WWOR	NEW YORK	NY	09	I		D	D	D	D	D	*	*	*	*	*
CAE420	KBHK	SAN FRANCISCO	CA	44	I		L	L	L	L	L	L	*	*	*	*
CAE420	KCRA	SACRAMENTO	CA	03	N	N	D	D	D	D	D	*	*	*	*	*
CAE420	KCSM	SAN MATEO	CA	60	E		L	L	L	L	L	L	*	*	*	*
CAE420	KDTV	SAN FRANCISCO	CA	14	I	S	L	L	L	L	L	L	*	*	*	*
CAE420	KGO	SAN FRANCISCO	CA	07	N	A	L	L	L	L	L	L	*	*	*	*
CAE420	KICU	SAN JOSE	CA	36	I		L	L	L	L	L	L	*	*	*	*
CAE420	KNTV	SAN JOSE	CA	11	N	A	L	L	L	L	L	*	*	*	*	*
CAE420	KOFY	SAN FRANSISCO	CA	20	I		L	L	L	L	L	*	*	*	*	*
CAE420	KPIX	SAN FRANCISCO	CA	05	N	C	L	L	L	L	L	L	*	*	*	*
CAE420	KQEC	SAN FRANCISCO	CA	32	E		L	L	L	L	L	L	*	*	*	*
CAE420	KQED	SAN FRANCISCO	CA	09	E		L	L	L	L	L	L	*	*	*	*
CAE420	KRON	SAN FRANCISCO	CA	04	N	N	L	L	L	L	L	L	*	*	*	*
CAE420	KSTS	SAN JOSE	CA	48	I		L	*	*	*	*	*	*	*	*	*
CAE420	KTEH	SAN JOSE	CA	54	E		L	L	L	L	L	L	*	*	*	*
CAE420	KTSF	SAN FRANCISCO	CA	26	I	S	L	L	L	L	L	*	*	*	*	*
CAE420	KTVU	OAKLAND	CA	02	I	F	L	L	L	L	L	L	*	*	*	*
CAE420	KTXL	SACRAMENTO	CA	40	I	F	D	D	D	D	D	*	*	*	*	*
CAE420	KXTV	SACRAMENTO	CA	10	N	C	D	D	D	D	D	*	*	*	*	*
CAE420	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	*	*	*	*
CAE420	WZTV	NASHVILLE	TN	17	I	F	*	*	*	*	L	*	*	*	*	*
CAF100	KBHK	SAN FRANCISCO	CA	44	I		D	*	*	*	*	*	*	*	*	*
CAF100	KEET	EUREKA	CA	13	E		L	L	L	L	L	L	L	L	L	*
CAF100	KGO	SAN FRANCISCO	CA	07	N	A	D	D	D	D	D	D	D	*	*	*
CAF100	KIEM	EUREKA	CA	03	N	N	L	L	L	L	L	L	L	L	L	*

CAF100	KPIX	SAN FRANCISCO	CA	05	N	C	D	D	D	D	D	D	D	D	D	D
CAF100	KREQ	ARCATA-EUREKA	CA	23	I		*	L	L	L	L	*	*	L	L	*
CAF100	KRON	SAN FRANCISCO	CA	04	N	N	D	D	D	D	D	D	D	D	D	D
CAF100	KTVU	OAKLAND	CA	02	I	F	D	D	D	D	D	D	D	D	D	D
CAF100	KTXL	SACRAMENTO	CA	40	I	F	D	*	*	*	*	*	*	*	*	*
CAF100	KVIQ	EUREKA	CA	06	N	C	L	L	L	L	L	L	L	L	L	*
CAF100	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAF110	KBHK	SAN FRANCISCO	CA	44	I		L	L	L	L	L	L	L	L	L	L
CAF110	KCSM	SAN MATEO	CA	60	E		L	L	L	*	*	*	L	L	L	L
CAF110	KDTV	SAN FRANCISCO	CA	14	I	S	L	L	L	L	L	L	L	L	L	L
CAF110	KFCB	CONCORD	CA	42	I		L	L	L	*	*	*	*	L	L	L
CAF110	KGO	SAN FRANCISCO	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAF110	KICU	SAN JOSE	CA	36	I		L	L	L	L	L	L	L	L	L	L
CAF110	KNTV	SAN JOSE	CA	11	N	A	L	L	L	L	L	L	L	L	L	L
CAF110	KOFY	SAN FRANSISCO	CA	20	I		L	L	L	L	L	L	L	L	L	L
CAF110	KPIX	SAN FRANCISCO	CA	05	N	C	L	L	L	L	L	L	L	L	L	L
CAF110	KQEC	SAN FRANCISCO	CA	32	E		L	L	L	*	*	*	*	*	*	*
CAF110	KQED	SAN FRANCISCO	CA	09	E		L	L	L	L	L	L	L	L	L	L
CAF110	KRON	SAN FRANCISCO	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAF110	KSTS	SAN JOSE	CA	48	I		L	L	L	*	*	*	*	L	L	L
CAF110	KTEH	SAN JOSE	CA	54	E		L	L	L	L	L	L	L	L	L	L
CAF110	KTSF	SAN FRANCISCO	CA	26	I	S	L	L	L	L	L	L	L	L	*	L
CAF110	KTVU	OAKLAND	CA	02	I	F	L	L	L	L	L	L	L	L	L	L
CAF110	KTXL	SACRAMENTO	CA	40	I	F	D	D	D	D	D	D	*	*	*	*
CAF110	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAF110	WWOR	NEW YORK	NY	09	I		*	*	*	*	*	*	D	D	D	D
CAF170	KBHK	SAN FRANCISCO	CA	44	I		L	L	L	L	L	L	L	L	L	L
CAF170	KDTV	SAN FRANCISCO	CA	14	I	S	L	L	L	L	L	L	L	L	L	L
CAF170	KGO	SAN FRANCISCO	CA	07	N	A	L	L	L	L	L	L	L	L	L	L
CAF170	KICU	SAN JOSE	CA	36	I		L	L	L	L	L	L	L	L	L	L
CAF170	KNTV	SAN JOSE	CA	11	N	A	*	*	L	L	L	L	L	L	L	L
CAF170	KOFY	SAN FRANSISCO	CA	20	I		L	L	L	L	L	L	L	L	L	L
CAF170	KPIX	SAN FRANCISCO	CA	05	N	C	L	L	L	L	L	L	L	L	L	L
CAF170	KQED	SAN FRANCISCO	CA	09	E		L	L	L	L	L	L	L	L	L	L
CAF170	KRON	SAN FRANCISCO	CA	04	N	N	L	L	L	L	L	L	L	L	L	L
CAF170	KTEH	SAN JOSE	CA	54	E		*	*	*	*	*	L	L	L	L	L
CAF170	KTSF	SAN FRANCISCO	CA	26	I	S	L	L	L	L	L	L	L	L	L	L
CAF170	KTVU	OAKLAND	CA	02	I	F	L	L	L	L	L	L	L	L	L	L
CAF170	KTXL	SACRAMENTO	CA	40	I	F	D	D	D	D	*	*	*	*	*	*
CAF170	WTBS	ATLANTA	GA	17	I		D	D	D	D	D	D	D	D	D	D
CAF180	KAIL	FRESNO	CA	53	I		L	L	L	L	L	L	L	L	L	L
CAF180	KCBS	LOS ANGELES	CA	02	N	C	*	*	*	L	L	L	L	L	L	L
CAF180	KFSN	FRESNO	CA	30	N	C	L	L	L	L	L	L	L	L	L	L
CAF180	KFTV	HANFORD	CA	21	I	S	L	L	L	L	L	L	L	L	L	L
CAF180	KJEO	FRESNO	CA	47	N	C	L	L	L	L	L	L	L	L	L	L
CAF180	KMPH	VISALIA	CA	26	I	F	L	L	L	L	L	L	L	L	L	L
CAF180	KMSG	SANGER	CA	59	I		*	L	L	L	L	L	L	L	L	L
CAF180	KSEE	FRESNO	CA	24	N	N	L	L	L	L	L	L	L	L	L	L
CAF180	KTVU	OAKLAND	CA	02	I	F	*	D	D	D	D	D	*	*	*	*
CAF180	KTXL	SACRAMENTO	CA	40	I	F	D	D	D	D	D	D	*	*	*	*

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CHANGE	SYS_ID	OWNER_NA	DELTROYL	WGHLOCL	WGHSERS	WGHSPRT	WGHMVSE	WGHDEVO
901	ALJ400	CABLE SOUTH INC	-0.551786634	-0.563128373	-0.424781201	-0.154680736	-0.349694163	-0.245592642
901	ARR300	DONREY OF NEVADA INC	4.534607847	1.151482206	1.30160087	1.051135521	0.955996401	0.885174957
902	AZT960	ROBIN CABLE SYSTEMS	-0.630100589	-0.740936828	-0.680574634	-0.392662799	-0.612439774	-0.8746667
892	CAA720	KING VIDEOCABLE COMPANY	0.199993814	-0.789856206	-0.711255256	-0.352032283	-0.679485782	-0.853101096
902	CAA780	AMERICAN TV & COMMUNICATION	0.046176008	0.003911744	-0.062495618	0.298153375	-0.016310301	-0.008304375
891	CAA810	FALCON CABLE SYSTEMS CO	0.177608028	1.039195116	0.888181874	0.280958183	0.674260624	1.021975531
902	CAA810	FALCON CABLE SYSTEMS CO	-0.129139363	-0.333459037	-0.193199397	-0.180531526	-0.188531139	-0.024637329
892	CAB060	COX CABLE BAKERSFIELD INC	-0.13994822	-0.154126288	-0.251524182	-0.157519204	-0.285345936	-0.074108301
891	CAB310	COX CABLE SAN DIEGO INC	-0.19024277	0.010150826	-0.303954076	-0.036205365	-0.264876526	-0.061182066
901	CAC350	SAMMONS COMMUNICATIONS INC	-0.617459127	-0.875540559	-0.532105434	-0.707351109	-0.451513207	-0.660578014
892	CAC370	COOKE CABLEVISION INC	0.077950135	-0.383257342	-0.238475481	0	-0.197507097	-0.423221623
901	CAC640	AMERICAN CABLE TV INVESTORS	-0.381068245	-0.772967928	-0.48026233	-0.819903371	-0.444752845	-0.779783164
901	CAC670	AMERICAN CABLESYSTEMS OF CA	-0.424751226	-0.563128373	-0.424781201	-0.154680736	-0.349694163	-0.245592642
892	CAC770	COPLEY/COLONY CABLEVISION	0.014686971	-0.549223203	-0.28592161	0.228342218	-0.002917627	0.002446776
902	CAC770	COPLEY/COLONY CABLEVISION	0.020646826	0.495084322	-0.093594929	1.897540524	-0.117269384	0.333614827
902	CAC880	CROCKETT CABLE SYSTEMS INC	-0.3993089	-0.103979995	-0.573020093	0	-0.459935849	-0.931769125
892	CAC940	COPLEY/COLONY CABLEVISION	0.056713315	-0.549223203	-0.28592161	0.228342218	-0.002917627	0.002446776
892	CAE420	WESTSTAR COMMUNICATIONS	0.030538442	-0.883207229	-0.776233614	-0.174219357	-0.647199396	-0.916769925
902	CAF100	COX CABLE HUMBOLDT INC	-0.091672471	-0.27880326	-0.136460678	0	-0.101971921	0
901	CAF110	UNITED CABLE TELEVISION CORP	-0.369409239	0.773305942	-0.112879348	0.008610922	-0.037858619	-0.916675957
891	CAF170	TCI CABLEVISION OF CALIFORNIA	-0.271544262	-0.496650087	-0.683577285	-0.090034058	-0.530791479	-0.928504185
901	CAF180	FRESNO CABLE TV LTD	-0.826953258	-0.899116579	-0.750189251	-0.707351109	-0.650480999	-0.949235827
901	CAH240	HAYWARD CABLE TELEVISION INC	-0.240349416	0.773305942	-0.112879348	0.008610922	-0.037858619	-0.916675957
902	CAI250	COMMUNITY CABLEVISION CO	0.089125874	-0.376920888	-0.185026554	1.033624141	-0.056450722	1.284471222
902	CAL550	BRENMOR CABLE PARTNERS	-0.37480074	-0.578750258	-0.650129068	0	-0.508309975	-0.931769125
891	CAM340	UACC MIDWEST INC	0.105397201	0.178198757	0.203335544	-0.016738847	0.130533018	2.284432918
902	CAM400	BRENMOR CABLE PARTNERS	-0.378416312	-0.578750258	-0.650129068	0	-0.508309975	-0.931769125
902	CAN100	TELE-VUE SYSTEMS INC	-0.411359869	-0.578750258	-0.650129068	0	-0.508309975	-0.931769125
892	CAO120	CABLE OAKLAND	-0.005035458	0.52113064	0.308626517	0.348142453	0.383348286	0.003684715
901	CAO120	LENFEST BERKS CABLE TV	-0.241860073	-0.202477971	-0.156587881	-0.421162605	-0.142288706	-0.976251929
902	CAP300	TELE-VUE SYSTEMS INC	-0.469089019	-0.924317017	-0.691625735	-0.554660105	-0.555102436	-0.931769125
892	CAP340	VOLCANO COMMUNICATIONS CO	2.479998692	-0.076026381	-0.163974243	-0.647967717	-0.203830142	-0.140779189
902	CAP420	CONTRA COSTA CABLE COMPANY	-0.47207636	-0.924317017	-0.691625735	-0.554660105	-0.555102436	-0.931769125
891	CAP540	TCI CABLEVISION OF TAHOE INC	-0.700300742	-0.060009173	-0.225054915	-0.621128505	-0.339999782	-0.737331162

901	CAP540	TCI CABLEVISION OF CALIFORNIA	-0.103964315	-0.089814078	-0.203342149	0.002616418	-0.196686323	-0.064321471
882	CAP560	KING VIDEOCABLE COMPANY	-0.314386499	-0.324644548	-0.522157266	-0.125798468	-0.484726637	-0.290342727
901	CAP560	KING VIDEOCABLE COMPANY	-0.388260153	-0.921740733	-0.52917962	-0.747278918	-0.533923172	-0.914849369
902	CAP620	AMERICAN CABLESYSTEMS OF CA	0.306402747	3.264992171	0.966720195	4.947054154	0.758272578	2.547065596
902	CAP780	FALCON CABLE SYSTEMS CO	0.01161343	-0.057965774	-0.210194793	0	-0.219698335	-0.032630559
901	CAR300	AMERICAN CABLE OF REDLANDS	-0.362870276	-0.772967928	-0.48026233	-0.819903371	-0.444752845	-0.779783164
892	CAR380	FOOTHILLS CABLEVISION LTD	-0.3669529	-0.549942822	-0.555883652	-0.477828552	-0.50088055	-0.5856493
891	CAS350	TCI CABLEVISION OF CALIFORNIA	-0.297194604	-0.496650087	-0.683577285	-0.090034058	-0.530791479	-0.928504185
902	CAS460	WESTERN TV CABLE	-0.428089172	-0.924317017	-0.691625735	-0.554660105	-0.555102436	-0.931769125
902	CAS475	TELEVISION SIGNAL SERVICE INC	-0.129033566	-0.820337022	-0.118605642	-0.554660105	-0.095166587	0
891	CAS535	TCI CABLEVISION OF CALIFORNIA	-0.280014638	-0.496650087	-0.683577285	-0.090034058	-0.530791479	-0.928504185
902	CAS545	WESTERN TV CABLE	-0.414945072	-0.924317017	-0.691625735	-0.554660105	-0.555102436	-0.931769125
882	CAS590	COX CABLE SANTA BARBARA INC	-0.178250125	-0.043245934	-0.667973443	0	-0.536468576	-0.749444768
902	CAS605	BRENMOR CABLE PARTNERS	-0.367910499	-0.578750258	-0.650129068	0	-0.508309975	-0.931769125
901	CAS620	UNITED CABLE TELEVISION CORP	-0.017067106	1.151482206	1.30160087	1.051135521	0.955996401	0.885174957
891	CAS665	HEARST CABLEVISION OF CA INC	-0.188291899	-0.560983294	-0.096776975	-0.345085823	-0.076149445	-0.142455199
902	CAS665	BRENMOR CABLE PARTNERS	-0.477973891	-0.892995122	-0.698601728	0	-0.563236476	-0.931769125
901	CAS695	COMCAST CBV OF SEAL BEACH	-0.353982836	-0.418959135	-0.162932273	0.357125168	-0.02409102	0.736740192
891	CAS780	JONES INTERCABLE INC	-0.551586897	0.021255858	0.053234641	-0.036205365	0.001187089	0.295673089
891	CAS865	TCI CABLEVISION OF CALIFORNIA	-0.29366096	-0.496650087	-0.683577285	-0.090034058	-0.530791479	-0.928504185
901	CAT420	PARAGON COMMUNICATIONS	-0.589952465	-0.86376508	-0.574383927	-0.771798754	-0.444961497	-0.510372688
901	CAT750	SAMMONS COMMUNICATIONS INC	-0.630717418	-0.875540559	-0.532105434	-0.707351109	-0.451513207	-0.660578014
882	CAW600	COPLEY/COLONY CABLEVISION	0.038411769	-0.416073611	-0.265082701	0.541458709	-0.02792262	0.347696494
882	CAY300	CAL-NOR CABLEVIEW INC	3.013676918	0.222912736	1.250566337	0.242414934	0.975044538	6.332852016
891	CAY300	CAL-NOR CABLEVIEW INC	-0.171692029	-0.084149564	-0.199396209	-0.167793983	-0.23918578	-0.396184117
901	CAY300	CAL-NOR CABLEVIEW INC	0.116274952	0.72373942	-0.159199472	0.152403725	-0.075336293	-0.786640695
891	COF650	TCI CABLEVISION OF COLORADO	0.109855013	0.978582974	0.83963877	1.207992299	0.974421576	0.841958931
901	COG250	TCI CABLEVISION OF COLORADO	-0.011515375	-0.514753514	-0.205751375	0.062430324	-0.165950821	-0.400499463
902	COG250	TCI CABLEVISION OF COLORADO	0.001471603	0.898215358	0.311090299	0.008733793	0.193535933	0.486537954
891	COG500	SOUTHWEST CABLEVISION LTD	-0.279578668	-0.42958467	-0.441822371	-0.231233512	-0.34147304	-0.027942326
891	COS650	HERITAGE CBV OF COLORADO INC	-0.23615364	0.046102266	0.016878885	-0.026040165	0.002515548	-0.027942326
901	CTB200	CABLEVISION SYSTEMS OF S CT	-0.646448376	-0.601148793	-0.51090122	-0.813966937	-0.458348859	-0.58552894
902	CTM500	COMCAST CBV OF MIDDLETON	-0.776178092	-0.125844366	-0.284393157	-0.15771332	-0.336116758	-0.367838992
901	CTN450	NEW MILFORD CABLEVISION CO	-0.443379743	-0.180963835	-0.416135351	-0.577618829	-0.442073076	-0.995150888
901	CTN600	CENTURY NORWICH CORP	-0.319000712	-0.524966063	-0.007888959	-0.34107551	0.105981942	-0.994374856

891	FLC090	FLORIDA CABLEVISION MANAGEM	2.065025035	0.522658701	0.240130302	0.507773558	0.309693785	0.490673177
902	FLC750	ADVOCATE COMMUNICATIONS INC	1.473736721	0.47698761	0.400591447	1.691669269	0.406915033	1.640425838
891	FLD025	STORER CABLE COMMUNICATION	-0.6171571	-0.049417176	-0.318385844	-0.393288795	-0.341225484	-0.562803258
891	FLF060	ONE FIFTY-FIVE CORP	0.254099395	2.699025528	1.776481917	0.375306796	1.03737025	-0.074264537
892	FLS020	CABLE SATELLITE ASSOCIATES	2.383317439	0.330003666	0.45521622	0.6054587	0.500692328	1.302125203
892	FLT140	CABLE TV FUND 12-BCD	0.142889059	-0.161660325	-0.156912035	0	-0.115807211	0
891	FLV200	MICRO CABLE COMMUNICATIONS	0.093469543	-0.001021256	0.009776907	-0.090034058	0.016508988	-0.147155027
891	GAM810	STORER CABLE COMMUNICATION	-0.883431993	-0.44124991	-0.614403255	-0.592897159	-0.57823354	-0.454132662
901	GAS600	US CABLE OF LAKE COUNTY	-0.083321434	-0.178674532	-0.263194927	-0.421162605	-0.20705105	-0.994987548
891	GAT200	TCI CABLEVISION OF THOMASVILL	-0.623645457	-0.260142557	-0.220093043	-0.489195613	-0.280990268	0.695446479
901	GAT300	AMERICAN CABLE TV INVESTORS	0.011330391	-0.897568012	-0.707523825	-0.857859161	-0.630145038	-0.787315081
891	GAV200	TCI CABLEVISION OF VALDOSTA	-0.738866395	-0.260142557	-0.220093043	-0.489195613	-0.280990268	0.695446479
891	IAA390	AMES CABLEVISION	0.03880181	-0.424703568	-0.434733651	-0.534614183	-0.497859461	-0.430715104
901	IAS275	POST-NEWSWEEK CABLE INC	-0.403514965	-0.178674532	-0.263194927	-0.421162605	-0.20705105	-0.994987548
882	IDI200	UPPER VALLEY TELECABLE CO INC	-0.035827211	-0.127367015	-0.312712681	0	-0.243202573	0
891	IDP350	TCI CABLEVISION OF IDAHO INC	-0.28346723	-0.162171384	-0.298728831	-0.031577627	-0.226949909	0.747176586
891	ILA050	CENTEL CABLE TELEVSISION CO	-0.343956646	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
891	ILC505	TELE-COMM OF SOUTH SUBURBIA	-0.292190258	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
891	ILG270	CENTEL CABLE TELEVSISION CO	-0.18573571	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
882	ILL150	CENTEL CABLE TELEVSISION CO	-0.578927174	-0.016115628	-0.290951431	-0.3553435	-0.333661428	-0.782866146
891	ILL150	CENTEL CABLE TELEVSISION CO	-0.322512455	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
882	ILL480	CONTINENTAL CBV OF ILLINOIS	-0.653714248	-0.200249348	-0.449760642	-0.113198389	-0.363329507	-0.246075528
882	ILV200	CENTEL CABLE TELEVSISION CO	-0.599687663	-0.011523112	-0.222296033	-0.26432462	-0.250221773	-0.630005992
891	ILV200	CENTEL CABLE TELEVSISION CO	-0.323780924	-0.42958467	-0.441822371	-0.231233512	-0.34147304	-0.027942326
891	ILW020	CENTEL CABLE TV CO OF ILLINOIS	-0.348284349	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
891	ILW380	CENTEL CABLE TELEVSISION CO	-0.334315465	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
902	INF650	COMCAST CABLEVISION OF INDIAN	-0.731676484	-0.422443703	-0.43257516	-0.031603973	-0.322035525	-0.852102563
891	KSD600	TCI OF KANSAS INC	-0.727451593	-0.561206393	-0.676840862	-0.234280166	-0.52302213	-0.687530454
891	KSG080	TCI OF KANSAS INC	-0.718363594	-0.561206393	-0.676840862	-0.234280166	-0.52302213	-0.687530454
902	KSL270	KANSAS CITY CABLE PARTNERS	-0.233947516	-0.453002158	-0.211776809	-0.114095335	-0.143217321	-0.643028642
882	KYG050	CENTEL CABLE TELEVSISION CO	-0.017877982	-0.521695551	-0.319490134	-0.433965252	-0.318261911	-0.240673455
901	KYP390	TELE-MEDIA CO OF KWV	0.923177481	-0.772967928	-0.48026233	-0.819903371	-0.444752845	-0.779783164
902	KYP390	TELE-MEDIA CO OF KWV	1.048497758	3.264992171	0.966720195	4.947054154	0.758272578	2.547065596
882	LAB120	TELECABLE ASSOCIATES INC	-0.378708595	-0.638920742	-0.647571627	-0.323214505	-0.514839306	0
902	LAB760	UNITED CABLE TV-BOSSIER CITY	-0.302652983	-0.461826126	-0.523178951	0.177661781	-0.375499922	-0.541736274

891	LAS240	CABLEVISION OF SHREVEPORT IN	-0.217739667	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
901	MAA250	TIMES MIRROR OF PIONEER VALLE	-0.582860942	-0.639054688	-0.374885849	-0.868782889	-0.239716352	-0.998581543
901	MAA450	INLAND BAY CABLE TV ASSOCIATE	-0.311261693	0.53942893	0.229424626	-0.219644734	0.33678589	-0.99496864
902	MAB150	CONTINENTAL CBV OF MA INC	-0.242504608	-0.356252016	-0.206972812	0	-0.161901888	-0.280720727
901	MAB700	ADAMS-RUSSELL CABLE SERVICES	-0.624745052	-0.86376508	-0.574383927	-0.771798754	-0.444961497	-0.510372688
901	MAC300	GREATER CHICOPEE CABLEVISION	-0.400266964	0.156269893	0.031450578	-0.23726564	0.206107232	-0.994526309
891	MAC400	AMERICAN CABLESYSTEM NORTH	-0.56886859	-0.559283029	-0.222314586	-0.026040165	-0.153723693	-0.347211674
901	MAE200	GREATER EASTHAMPTON CBV	-0.34884828	0.156269893	0.031450578	-0.23726564	0.206107232	-0.994526309
901	MAL600	GREATER NEW ENGLAND CBV	-0.35597996	0.290518602	0.024535151	-0.23726564	0.179660491	-0.9940506
891	MAM200	AMERICAN CABLESYSTEM NORTH	-0.574957324	-0.349871875	-0.311834571	1.018122438	-0.418626475	80.49142272
902	MAM200	AMERICAN CABLESYSTEM NORTH	2.465794545	0.129908904	0.387141488	0.335929905	0.53898972	0.451993073
901	MAM350	WARNER CABLE COMMUNICATION	-0.176881168	-0.088892486	-0.035856952	-0.563163361	0.098876737	-0.991618846
902	MAM350	WARNER CABLE COMMUNICATION	-0.800863098	-0.633646379	-0.401560978	-0.264646439	-0.400672873	-0.739948543
901	MAM500	CONTINENTAL CBV OF MA INC	1.258187049	-0.041770599	-0.188348208	-0.330481778	-0.159738601	-0.99420785
901	MAN100	UA-COLUMBIA CABLEVISION INC	-0.36947002	1.470679726	0.508545624	-0.616273602	0.416763195	-0.997797582
901	MAN550	CONTINENTAL CBV OF MA INC	-0.719074994	0.022601096	-0.156758473	-0.684130585	-0.122266533	-0.990206012
892	MAN600	CONTINENTAL CBV-W NEW ENGLA	0.256500523	-0.369565223	-0.538886385	-0.696478234	-0.512775671	-0.998904283
901	MAN600	CONTINENTAL CBV-W NEW ENGLA	0.040552106	-0.631576844	-0.170448517	0.177838663	-0.146133515	1.973138985
901	MAN700	ADAMS-RUSSELL CABLE SERVICES	-0.553528833	-0.86376508	-0.574383927	-0.771798754	-0.444961497	-0.510372688
901	MAP400	UNITED VIDEO CABLEVISION INC	1.841572798	1.470679726	0.508545624	-0.616273602	0.416763195	-0.997797582
891	MAR300	COLONIAL CABLEVISION CORP	-0.236361188	0.429170772	-0.246291399	0.003976879	-0.380137976	36.88638745
902	MAR300	CONTINENTAL CBV OF MA INC	0.040234598	0.171085664	0.707597783	0.519652615	1.15812237	1.809346904
901	MAT200	UA-COLUMBIA CABLEVISION INC	-0.381057069	1.470679726	0.508545624	-0.616273602	0.416763195	-0.997797582
901	MAU200	UNITED VIDEO CABLEVISION INC	1.090874247	1.470679726	0.508545624	-0.616273602	0.416763195	-0.997797582
902	MAW05	WARNER CABLE COMMUNICATION	-0.565590254	-0.333812053	-0.343377991	-0.117936446	-0.33560913	-0.288174473
901	MAW30	UNITED VIDEO CABLEVISION INC	0.117050716	-0.639054688	-0.374885849	-0.868782889	-0.239716352	-0.998581543
891	MAW50	CONTINENTAL CBV OF MA INC	-0.019549278	-0.191163312	-0.231984837	1.042370237	-0.323272777	40.80069861
892	MAW50	CONTINENTAL CBV OF MA INC	-0.158740235	0.201361587	0.238278897	0.455970101	0.434731544	0.002648695
901	MAW50	CONTINENTAL CBV OF MA INC	-0.729896779	0.022601096	-0.156758473	-0.684130585	-0.122266533	-0.990206012
902	MAW50	CONTINENTAL CBV OF MA INC	-0.048035459	-0.434032886	-0.355531526	0	-0.284365428	-0.777418224
891	MDA050	MULTIVIEW CABLE CORPORATION	0.064475646	1.649544057	0.02979373	-0.004086668	-0.036523545	-0.676855754
882	MDP050	JONES INTERCABLE INC	2.55460257	0.405076294	0.435579052	0.534152794	0.5004405	1.117434496
902	MDW20	JONES INTERCABLE INC	-0.474868409	-0.568837137	-0.359225198	-0.065064063	-0.297133548	-0.613127047
892	MES400	BEE LINE INC	-0.022896698	0.394148702	0.132501848	-0.001257606	-0.010791211	0.066651902
902	MIB350	PCI ONE INC	0.014007963	-0.376920888	-0.185026554	1.033624141	-0.056450722	1.284471222

901	MID600	C-TEC CABLE SYSTEMS MIDWEST	-0.924963608	0.165088116	-0.18475019	-0.028388404	-0.169476803	-0.355414649
902	MID600	C-TEC CABLE SYSTEMS MIDWEST	0.017392304	-0.374059881	-0.231849404	-0.115887067	-0.187970517	0
901	MIS825	MERCOM, INC.	-0.393720693	-0.207919857	-0.292286786	-0.07780306	-0.385074787	-0.484258559
892	MOC36	CARTHAGE CABLEVISION INC	0.080124286	1.21641771	0.777025669	0.267029453	0.501256474	0.0354135
902	MTB450	BILLINGS TELECOMMUNICATIONS	-0.167288505	-0.784008662	-0.25856313	0	-0.213304976	-0.278957082
891	MTB550	TCI CABLEVISION OF MONTANA	0.010906833	-0.147545695	-0.164249043	-0.157475091	-0.137012809	0.697569094
882	MTB700	TCI CABLEVISION OF MONTANA	0.113920687	0.511905333	0.128652216	0	0.110030797	0.435054953
891	MTB700	TCI CABLEVISION OF MONTANA	-0.02450602	-0.100052423	-0.143949859	-0.150887324	-0.122066536	0.517400503
902	MTB700	TCI CABLEVISION OF MONTANA	-0.140845693	-0.500357277	-0.231856207	0	-0.194798771	-0.195552624
891	MTH600	TCI CABLEVISION OF MONTANA	-0.715466138	-0.250393751	-0.499876586	-0.415848059	-0.481302497	0.36489957
902	MTH600	TCI CABLEVISION OF MONTANA	-0.243495822	-0.944987005	-0.49293138	0	-0.35098145	-0.86756897
891	MTM500	TCI CABLEVISION OF MONTANA	0.026310761	-0.162171384	-0.298728831	-0.031577627	-0.226949909	0.747176586
901	NCB270	AMERICAN TV & COMMUNICATION	-0.20432102	-0.418959135	-0.162932273	0.357125168	-0.02409102	0.736740192
891	NCB690	AMERICAN TV & COMMUNICATION	0.181769133	1.055446012	-0.020713891	0.171709315	-0.043678183	-0.468980793
901	NCD250	STAR CABLE ASSOCIATES	-0.733987511	-0.563128373	-0.424781201	-0.154680736	-0.349694163	-0.245592642
892	NCD700	CABLEVISION OF DURHAM INC	0.064909314	-0.399930952	-0.181094429	0.267104483	-0.000375783	1.223387277
882	NCH550	CAROLINA CABLE TV INC	0.02010239	0.330745375	-0.090433093	0.339891344	-0.030128389	-0.837684528
901	NCH550	CAROLINA CABLE TV INC	-0.619970725	-0.4733106	-0.42949813	0.036165102	-0.372145603	-0.601249079
901	NCM400	TELE-MEDIA CO-NORTH CAROLINA	0.383250723	-0.772967928	-0.48026233	-0.819903371	-0.444752845	-0.779783164
902	NCM400	TELE-MEDIA CO-NORTH CAROLINA	-0.030482181	3.264992171	0.966720195	4.947054154	0.758272578	2.547065596
891	NCM640	AMERICAN TELEVISION OF MIDWE	0.336853279	-0.198522941	-0.198691888	0.179405255	-0.011919479	1.05826845
901	NCN500	TAR RIVER COMMUNICATIONS INC	2.170286783	-0.4733106	-0.42949813	0.036165102	-0.372145603	-0.601249079
892	NCR160	AMERICAN TV & COMMUNICATION	0.346022464	-0.223905666	-0.190830182	0.799100349	-0.05128681	-0.271814652
901	NCS300	ATLANTIC TELEPHONE MEMBERSH	0.026089762	-1	-1	-1	-1	-1
902	NCS840	US CABLE TELEVISION GROUP LP	0.58629358	0.547557297	0.207637488	0	0.150138782	0
882	NDW35	TCI OF NORTH DAKOTA INC	-0.019156331	2.499037491	0.34100312	0	0.23545691	2.488127042
892	NEK200	HILLIARD, RUSSELL G	-0.243178739	-0.548821508	-0.437261927	-0.210752364	-0.333891299	-0.034202278
902	NHC500	CONTINENTAL CABLEVISION INC	1.541743217	-0.565161415	0.139560062	-0.058486206	0.0172615	3.237558885
891	NHC600	STATE CABLE TV CORP	-0.177072761	0.127876859	-0.300605654	-0.37741097	-0.295583825	0.699258424
902	NHK200	PARAGON COMMUNICATIONS	-0.015169895	-0.675790851	0.20309061	-0.071002316	0.026853595	4.645372167
902	NJA200	SERVICE ELECTRIC CABLE TV INC	0.210736091	-0.839328645	-0.24689232	0	-0.227337072	0
882	NJA600	NEW YORK TIMES CABLE CO OF NJ	0.392708827	0.028849281	0.465829034	0.329782637	0.548048529	2.87607157
901	NJB100	CABLEVISION SYSTEMS CORP	-0.599439605	-0.601148793	-0.51090122	-0.813966937	-0.458348859	-0.58552894
901	NJB300	CABLEVISION SYSTEMS CORP	-0.617611349	-0.601148793	-0.51090122	-0.813966937	-0.458348859	-0.58552894
891	NJC050	COMCAST CABLEVISION CORP	-0.34982266	-0.284449871	-0.625474987	-0.341058144	-0.519290872	-0.702299461

901	NJD200	SAMMONS COMMUNICATIONS INC	-0.538382775	-0.668952112	-0.585250177	-0.754089851	-0.468826241	-0.817525319
901	NJE550	TKR CABLE COMPANY	-0.548103778	-0.668952112	-0.585250177	-0.754089851	-0.468826241	-0.817525319
892	NJH400	RIVERVIEW CABLEVISION	-0.380151017	-0.343747001	-0.64559587	-0.287009095	-0.522520463	-0.656663346
901	NJM650	SAMMONS COMMUNICATIONS INC	-0.55560911	-0.668952112	-0.585250177	-0.754089851	-0.468826241	-0.817525319
882	NJN200	STORER CABLE COMMUNICATION	-0.274552123	-0.014857228	-0.31850594	-0.069622086	-0.321446694	-0.94527596
891	NJN200	STORER CABLE COMMUNICATION	0.063919431	-0.668786496	-0.097888307	-0.075806084	-0.103862172	-0.132919438
902	NJN200	STORER CABLE COMMUNICATION	-0.637454074	-0.603416983	-0.610237229	-0.56571015	-0.489532993	-0.817526332
882	NJN300	GILBERT MEDIA ASSOCIATES	0.120629871	-0.234070641	-0.081609952	-0.201028919	0.005105569	16.62257222
892	NJN300	GILBERT MEDIA ASSOCIATES	0.119724302	0.490163028	0.127477202	0.12592279	-0.015282898	-0.900665721
902	NJP350	SAMMONS COMMUNICATIONS INC	-0.284570009	-0.44615201	-0.267262868	0	-0.249917635	-0.148808402
892	NJP400	HOME LINK COMM OF PRINCETON	0.007825602	-0.190769006	-0.447214213	-0.173687682	-0.35325384	-0.442115066
901	NJP400	HOME LINK COMM OF PRINCETON	-0.652409484	0.313728424	0.835912719	0.305640012	0.508752576	0.767748451
901	NJS100	TRI-COUNTY CABLE TELEVISION C	-0.423919781	-0.455130401	-0.306235445	-0.427602051	-0.25247354	-0.791128548
891	NJW100	SUBURBAN CABLEVISION	-0.326255862	-0.284449871	-0.625474987	-0.341058144	-0.519290872	-0.702299461
891	NJW400	MICRO CABLE COMMUNICATIONS	-0.35909569	-0.178289225	-0.544983252	-0.536197961	-0.498172207	-0.446109868
891	NMB100	CENTURY NEW MEXICO CABLE TV	0.244299798	1.318599588	0.807019881	0.234035796	0.505032957	0.006481638
901	NVR100	TCI CABLEVISION OF NEVADA INC	-0.32210824	-0.740935071	-0.632393171	-0.655100581	-0.483681986	-0.946335534
882	NYB660	SUFFOLK CABLE CORP SHELTER I	0.007812838	-0.011409821	-0.554958245	-0.232425237	-0.476681195	-0.912248162
882	NYB690	TCI OF NEW YORK INC	-0.298983361	-0.070382752	-0.226684628	-0.328674141	-0.243243307	-0.122228294
901	NYB690	TCI OF NEW YORK INC	-0.735936703	-0.157889226	-0.220215415	-0.678770622	-0.159866974	-0.997798084
891	NYC090	GATEWAY CABLEVISION CORP	0.078207887	0.530405471	0.217398578	0.849623989	0.121802522	81.52216626
892	NYC090	GATEWAY CABLEVISION CORP	-0.031022242	-0.06065341	-0.277742437	-0.21382273	-0.299269122	-0.000752683
902	NYL600	CABLE TV FUND 11-B	-0.653408667	-0.21300761	-0.32648376	-0.264646439	-0.347370984	-0.516662197
891	NYM280	CABLEVISION INDUSTRIES LP	2.322029249	1.214915751	0.157595241	1.961237976	0.144892741	110.1311246
891	NYM680	CABLEVISION INDUSTRIES LP	-0.295494793	0.464922784	-0.278838583	-0.852018374	-0.337151546	-0.763944939
901	NYO400	TKR CABLE COMPANY	-0.624629976	-0.601148793	-0.51090122	-0.813966937	-0.458348859	-0.58552894
891	NYP500	CABLEVISION INDUSTRIES LP	-0.041468261	-0.637491564	-0.451484795	-1	-0.497852345	-1
901	NYS810	COOKE CABLEVISION OF SYRACU	-0.694251611	0.005135367	-0.163783618	-0.656568964	-0.097945175	-0.995447784
891	NYV400	CABLEVISION INDUSTRIES LP	2.337847638	1.214915751	0.157595241	1.961237976	0.144892741	110.1311246
891	NYW030	CABLEVISION INDUSTRIES LP	-0.277836286	-0.637491564	-0.451484795	-1	-0.497852345	-1
882	NYW720	CABLEVISION INDUSTRIES LP	0.151406128	-0.214714359	-0.46314681	-1	-0.504818018	-0.657887616
901	NYY100	CABLEVISION SYSTEMS CORP	-0.616661342	-0.601148793	-0.51090122	-0.813966937	-0.458348859	-0.58552894
882	OHA150	WARNER CABLE COMMUNICATION	-0.044529148	-0.039196729	-0.125527968	-0.010314679	-0.104811853	-0.84169365
901	OHA300	V CABLE INC	-0.385112578	-0.739893652	-0.558495626	-0.783158118	-0.460845034	-0.912823284
891	OHC090	WARNER CABLE COMMUNICATION	-0.058854818	-0.052882606	-0.303953846	-0.135373451	-0.247380877	-0.522876093

892	OHC090	WARNER CABLE COMMUNICATION	-0.010983111	0.472167671	0.564148055	0.064950897	0.429329991	1.949514241
882	OHC660	UNITED VIDEO CABLEVISION INC	-0.928087038	-0.159606819	-0.119467167	0	-0.080233945	-0.444943705
891	OHC660	UNITED VIDEO CABLEVISION INC	-0.001334424	0.165334109	0.050793041	0.425493491	-0.09097244	63.59775128
902	OHC660	UNITED VIDEO CABLEVISION INC	-0.582783113	-0.596055006	-0.544895636	-0.153002646	-0.48426674	-0.564829027
891	OHE150	TCI CABLEVISION OF OHIO INC	-0.618341849	-0.314881474	-0.237805763	-0.364778571	-0.236312868	-0.338034529
901	OHE550	V CABLE INC	-0.614306209	-0.86376508	-0.574383927	-0.771798754	-0.444961497	-0.510372688
891	OHK200	CONTINENTAL CABLEVISION INC	1.056525064	0.87691666	0.430442768	0.513998288	0.41388747	-0.340864731
892	OHK200	CONTINENTAL CABLEVISION INC	-0.506977444	-0.340118913	-0.317391779	-0.340368817	-0.234883105	-0.652611046
882	OHM18	TCI CABLEVISION OF OHIO INC	0.11719907	-0.075676828	-0.21931635	-0.037560654	-0.170316564	-0.76534285
901	OHM26	WARNER CABLE COMMUNICATION	-0.599919246	-0.567455297	-0.538029586	-0.219640525	-0.461066683	-0.658038776
901	OHM50	ARMSTRONG UTILITIES `NC	-0.257918057	-0.418959135	-0.162932273	0.357125168	-0.02409102	0.736740192
902	OHO200	ARMSTRONG UTILITIES INC	1.367420367	0.28553939	0.650714099	4.947054154	0.596919571	0.866970849
891	OHP080	COX CABLE CLEVELAND AREA	-0.414735356	-0.639289497	-0.644125968	-0.38414825	-0.506829794	-0.147155027
901	OHP080	COX CABLE CLEVELAND AREA	-0.054549383	1.151482206	1.30160087	1.051135521	0.955996401	0.885174957
892	OHS520	CONTINENTAL CABLEVISION INC	-0.035319023	0.024883405	-0.137849334	-0.035770154	0.007205228	-0.432720262
901	OHS740	CENTURY OHIO CABLE TELEVISIO	-0.100411606	-0.224587342	-0.156137568	-0.526086754	-0.180853971	-0.033297682
882	OKB240	MULTIMEDIA CABLEVISION INC	-0.98599638	-0.00921814	-0.490952082	0	-0.36105593	-0.950726214
891	OKD150	TAR RIVER COMMUNICATIONS INC	0.053545038	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
892	OKD150	MULTIMEDIA CABLEVISION INC	0.083287961	0.002398047	0.962885183	0	0.572247164	13.34720601
901	OKD150	MULTIMEDIA CABLEVISION INC	0.47421876	-0.034026439	-0.479246886	0.071044405	-0.379057015	-0.945555702
891	OKE100	MULTIMEDIA CABLEVISION INC	0.317773685	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
891	OKM480	MULTIMEDIA CABLEVISION INC	0.00668934	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
891	OKN250	MULTIMEDIA CABLEVISION INC	0.110079056	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
901	OKO840	COX CABLE OF OKLAHOMA CITY IN	-0.756396641	-0.20387055	-0.468080126	-0.111643648	-0.369208348	-0.898361368
882	OKO880	HARTE-HANKS CABLE COMM INC	0.131499256	-0.008512006	-0.331359569	0	-0.266623378	-0.912561325
892	OKO880	COMMUNICATIONS SERVICES INC	0.18507912	-0.452163785	-0.289269967	-0.396325332	-0.323629096	-0.076203813
901	OKT400	TULSA CABLE TELEVISION INC	-0.439991991	-0.20387055	-0.468080126	-0.111643648	-0.369208348	-0.898361368
891	OKY400	MULTIMEDIA CABLEVISION INC	-0.029008864	0.036459148	-0.482359921	-0.026040165	-0.359448636	-0.952103038
892	ORB050	COOKE CABLEVISION INC	0.03237447	-0.187803798	-0.109021574	0	-0.090369203	0
901	ORB050	TCI OF OREGON INC	0.150086112	0.289624727	0.158081933	-0.48756072	0.137305397	-0.031128401
882	ORC050	CANBY TELEPHONE ASSOCIATION	-0.551006637	-0.454723167	-0.451087404	-0.210679475	-0.34312544	0
901	ORE500	TCI CABLEVISION OF OREGON INC	-0.07478535	-0.474887322	-0.132300412	-0.323098939	-0.104217451	-0.048918916
902	ORE500	TCI CABLEVISION OF OREGON INC	-0.343064789	-0.335325206	-0.281663326	-0.335842958	-0.288272461	-0.068449101
901	ORG500	TCI OF OREGON INC	-0.026558669	-0.070004238	-0.062157478	-0.492464222	-0.049452863	-0.198508999
902	ORG500	TCI OF OREGON INC	-0.159026341	-0.031598886	-0.270182326	0	-0.229949029	-0.531545899

901	ORK200	TCI OF OREGON INC	-0.073300754	-0.070004238	-0.062157478	-0.492464222	-0.049452863	-0.198508999
902	ORK200	TCI OF OREGON INC	-0.168521483	-0.031598886	-0.270182326	0	-0.229949029	-0.531545899
902	ORR500	FALCON COMMUNICATIONS CORP	-0.310180525	-0.743107353	-0.466989332	-0.452921107	-0.405897901	-0.585239964
882	PAC080	RAYSTAY COMPANY	-0.516784448	-0.511132096	-0.181815299	-0.462806413	-0.208820991	-0.016392988
902	PAC080	RAYSTAY COMPANY	-0.309927399	-0.14356966	-0.421239975	-0.294666528	-0.412924162	-0.21754708
892	PAC310	CHESTER COUNTY BROADCASTIN	-0.59417832	-0.096962597	-0.240797716	-0.518644387	-0.187724545	-0.997103647
901	PAC490	TCI OF PENNSYLVANIA INC	-0.7281848	0.012008356	-0.288271261	-0.355707977	-0.299034974	-0.573139999
882	PAD080	TELE-MEDIA CO OF LUZERNE CO	1.757844561	0.445340802	0.205957153	0.743051768	0.302535384	0.210932804
892	PAD440	CMA CABLEVISION ASSOCIATES V	0.04756512	-0.272271099	-0.141603937	-0.001885675	-0.121993361	-0.066063959
902	PAD440	TELE-MEDIA CO	-0.159434078	-0.064250042	-0.244200028	-0.245736949	-0.211731943	-0.077761915
901	PAE270	SAMMONS COMM OF NEW JERSEY	-0.009517916	0.172089314	-0.031393546	0.165833479	-0.057514607	-0.01975612
901	PAE540	ARMSTRONG UTILITIES INC	-0.361501736	-0.418959135	-0.162932273	0.357125168	-0.02409102	0.736740192
892	PAG450	G S COMMUNICATIONS	-0.632245108	-0.292240823	-0.397269099	-0.51939363	-0.393452994	-0.571326801
901	PAH240	SAMMONS COMMUNICATIONS INC	-0.161608086	-0.189592008	-0.098377246	-0.457258082	-0.043129743	-0.923831839
901	PAH330	UCA CORP	-0.766721565	-0.157889226	-0.220215415	-0.678770622	-0.159866974	-0.997798084
901	PAH360	UCA CORP	-0.766208419	-0.157889226	-0.220215415	-0.678770622	-0.159866974	-0.997798084
882	PAH450	SERVICE ELECTRIC CABLE TV INC	0.566329297	0.168373989	0.08304413	-0.410790544	0.021463864	0.156934404
892	PAJ800	AMERICAN TV & COMMUNICATION	0.021490648	-0.007119537	-0.320341463	-0.063035275	-0.331294408	-0.585063674
901	PAJ800	AMERICAN TV & COMMUNICATION	-0.173172608	-0.208458936	-0.106216957	0.377419442	-0.001335315	0.259559336
902	PAJ800	AMERICAN TV & COMMUNICATION	0.015958485	0.287696997	0.171633054	-0.500778472	0.049643214	-0.183257091
891	PAK250	CLEAR CHANNELS CABLE TV CO	0.033635726	3.919717512	3.040381519	1.207998261	2.057465904	1.13115894
891	PAK400	KEYSTONE CABLE TV INC	1.287114986	0.153551548	0.176228425	0.832110911	0.100064634	70.67525778
882	PAM140	HELICON GROUP LTD	2.837583523	0.233730876	0.149542057	0.033095925	0.110074517	2.094614438
891	PAN660	NEWTOWN CABLEVISION	-0.528415035	-0.296120544	-0.440720631	1.018122438	-0.547874111	65.58467293
882	PAN840	CABLEVISION OF PENNSYLVANIA	0.413595239	0.540723969	0.316533288	1.03642949	0.456455213	0.347696494
901	PAN840	CABLEVISION OF PENNSYLVANIA	-0.124649522	0.24378718	0.09215962	-0.135356756	0.181995784	-0.994186005
902	PAN840	CABLEVISION OF PENNSYLVANIA	0.025770914	-0.139694667	0.060084435	-0.494778174	0.089094967	-0.216434578
882	PAN900	SUBURBAN CABLE TV CO INC	-0.597420794	-0.350954473	-0.240429385	-0.508944452	-0.313401476	-0.257993172
892	PAN900	SUBURBAN CABLE TV CO INC	0.055404227	0.322539894	0.38143258	0.46732325	0.681435634	0.002675439
901	PAN900	SUBURBAN CABLE TV CO INC	-0.430195794	-0.157889226	-0.220215415	-0.678770622	-0.159866974	-0.997798084
901	PAP050	SUBURBAN CABLE TV CO INC	-0.378746761	0.113725094	0.07721983	-0.528652665	0.412629608	-0.997792193
882	PAP270	SUBURBAN CABLE TV CO INC	-0.599352628	-0.350954473	-0.240429385	-0.508944452	-0.313401476	-0.257993172
902	PAP270	SUBURBAN CABLE TV CO INC	0.003423764	-0.110770292	-0.06573768	-0.017619188	0.004389347	-0.298196858
901	PAP420	MONTGOMERY CABLEVISION	0.010351083	-0.048980678	-0.369160676	-0.689832183	-0.345435816	-0.999214121
901	PAR160	AMERICAN TV & COMMUNICATION	-0.465509737	-0.639054688	-0.374885849	-0.868782889	-0.239716352	-0.998581543

902	PAR240	TCI OF PENNSYLVANIA INC	-0.251446955	-0.564005173	-0.288720792	-0.385790733	-0.241337578	-0.065365147
892	PAR480	CHIODO, FRANK	0.117356434	-0.549942822	-0.555883652	-0.477828552	-0.50088055	-0.5856493
901	PAR480	CHIODO, FRANK	0.021381803	1.151482206	1.30160087	1.051135521	0.955996401	0.885174957
902	PAS440	SHEN HEIGHTS TV ASSOCIATES IN	-0.012131627	-0.097464442	-0.154199825	-0.157399052	-0.208272941	-0.01687063
891	PAS740	MONTGOMERY CABLEVISION	0.044575308	-0.060890467	-0.483479469	1.018122438	-0.545779223	81.88768485
901	PAS740	MONTGOMERY CABLEVISION	0.016545577	0.113725094	0.07721983	-0.528652665	0.412629608	-0.997792193
882	PAU500	SUBURBAN CABLE TV CO INC	-0.596986084	-0.288294875	-0.303416974	-0.348174443	-0.333529054	-0.527730373
901	PAW775	CENTURY LYKENS CABLE CORP	-0.407821361	-0.896662226	-0.272255642	-0.038128621	-0.14461698	-0.075669128
882	PAW800	EASTERN TELECOM CORP	0.313847612	1.121848696	1.235936395	0.789249767	1.03149432	1.117434496
892	PAW800	EASTERN TELECOM CORP	0.264908803	-0.549942822	-0.555883652	-0.477828552	-0.50088055	-0.5856493
901	PAW800	EASTERN TELECOM CORP	-0.023144454	1.151482206	1.30160087	1.051135521	0.955996401	0.885174957
892	PAY100	YORK CABLE TELEVISION INC	-0.190224674	-0.114107605	-0.42016128	-0.084743424	-0.351911699	-0.363690686
901	PAY100	YORK CABLE TELEVISION INC	-0.476645799	-0.506684677	-0.532379029	-0.723124159	-0.476944115	-0.981874009
901	RIE200	CABLE TV OF EAST PROVIDENCE	-0.338614953	0.176950957	0.126233775	-0.424736566	0.221213718	-0.982659374
891	RIP500	RHODE ISLAND CATV CORP	0.081615987	0.006699766	-0.487305013	0.604662759	-0.544096918	62.70615042
891	SCL600	HORRY TELEPHONE COOPERATIV	-0.665367824	0.398282608	-0.327760661	-0.207352079	-0.261514244	0.912737292
882	SDH500	MIDCONTINENT CABLE SYSTEMS	1.165798142	1.420692327	1.580885064	0.588960136	1.044410167	1.215034475
892	SDH500	MIDCONTINENT CABLE SYSTEMS	-0.178715495	-0.434878909	-0.252110406	-0.082510132	-0.25161848	-0.29281387
901	SDH500	MIDCONTINENT CABLE SYSTEMS	-0.281477635	-0.376543335	-0.479210338	0.06635423	-0.379038804	-0.664775285
902	SDR250	TCI CBV OF SOUTH DAKOTA	-0.276182014	-0.53353108	-0.634052479	1.260624906	-0.358053344	-0.932964715
891	TNC330	CENCOM CABLE INCOME PARTNE	-0.185589434	-0.42958467	-0.441822371	-0.231233512	-0.34147304	-0.027942326
891	TNG200	GERMANTOWN CABLEVISION ASS	2.744866924	-0.42958467	-0.441822371	-0.231233512	-0.34147304	-0.027942326
891	TNM610	DANIELS COMMUNICATION PARTN	-0.592816085	-0.42958467	-0.441822371	-0.231233512	-0.34147304	-0.027942326
882	TXA280	SCOTT CABLE COMMUNICATIONS I	-0.940375831	-0.434875343	-0.22980898	-0.443286449	-0.316696974	-0.255451803
891	TXA280	SCOTT CABLE COMMUNICATIONS I	0.106707813	1.077451267	0.303700331	0.672957636	0.460911495	4.427240939
891	TXB160	TCI CABLEVISION OF TEXAS INC	-0.523916583	-0.059474938	0.136135645	-0.35521948	0.107563518	-0.451038012
892	TXK520	TIMES MIRROR CATV-KERRVILLE	3.625691052	1.221939897	1.251662218	0.915079814	1.003528415	1.413414531
902	TXM420	UNITED VIDEO CABLEVISION INC	-0.798971883	-0.202044619	-0.465294686	-0.263301433	-0.351261341	-0.63562316
891	TXO680	TCI CABLEVISION OF TEXAS INC	-0.527689482	-0.059474938	0.136135645	-0.35521948	0.107563518	-0.451038012
891	TXP400	TCI CABLEVISION OF TEXAS INC	-0.527700722	-0.059474938	0.136135645	-0.35521948	0.107563518	-0.451038012
902	TXP460	FALCON TELECABLE	-0.591654558	9.110017285	2.379952436	6.871416643	1.62173919	3.099751207
901	TXT225	TIMES MIRROR CATV-TEXARKANA	-0.630136188	0.010128931	-0.434003616	-0.222371218	-0.35150031	-0.77430532
902	TXW050	CABLEVISION INVESTORS INC	-0.077032566	-0.903273795	-0.126147781	-0.063968332	-0.100940288	0
882	TXW390	VISTA CABLEVISION INC	-0.345467807	-0.07660268	-0.325067393	-0.206849825	-0.261545496	-0.040142881
901	TXW390	VISTA CABLEVISION INC	-0.10367713	-0.034026439	-0.479246886	0.071044405	-0.379057015	-0.945555702

891	UTP400	TCI CABLEVISION OF UTAH INC	-0.293489758	-0.529194166	-0.548387464	-0.491425983	-0.499624991	-0.597227223
892	VAB520	TELE-MEDIA CO OF VIRGINIA	-0.003421791	-0.548821508	-0.437261927	-0.210752364	-0.333891299	-0.034202278
882	VAC390	CHESTERFIELD CABLEVISION INC	-0.642347224	-0.288294875	-0.303416974	-0.348174443	-0.333529054	-0.527730373
891	VAC390	CHESTERFIELD CABLEVISION INC	0.118172385	-0.198522941	-0.198691888	0.179405255	-0.011919479	1.05826845
891	VAC510	SCOTT CABLE COMMUNICATIONS I	-0.350520084	-0.650404413	-0.614601224	-0.163146567	-0.521573698	-0.719157444
882	VAF080	MEDIA GENERAL INC	-0.867749982	-0.713362723	-0.529691032	-0.382682727	-0.522380495	-0.535783869
891	VAF080	MEDIA GENERAL INC	2.091473473	0.784619961	0.35425594	0.373197829	0.310304853	1.156642561
901	VAH050	WARNER CABLE COMMUNICATION	-0.72945605	-0.824695509	-0.743383039	-0.757864047	-0.655304094	-0.981451965
901	VAH350	CONTINENTAL CBV OF VIRGINIA	-0.658231476	-0.123916867	-0.360801399	-0.728857696	-0.319617177	-0.883737689
901	VAN250	NEWPORT NEWS CABLEVISION LT	-0.42566002	-0.232259968	-0.115346341	0.665884978	-0.045931911	-0.203651791
902	VAN250	NEWPORT NEWS CABLEVISION LT	-0.378235053	-0.026138733	-0.429501304	-0.135597209	-0.36475251	-0.917384009
891	VAP650	COLUMBIA ASSOCIATES LP	-0.512657423	-0.573186675	-0.462669318	-0.206160922	-0.402790106	-0.763351154
891	VAP700	COLUMBIA ASSOCIATES LP	2.582672417	-0.394795885	-0.237992154	-0.118200035	-0.19713947	-0.074264537
901	VAR700	COX CABLE ROANOKE INC	-0.209125053	-0.248515609	-0.172883951	0.926916363	-0.073794227	-0.431197266
901	VAS160	BOOTH AMERICAN COMPANY	-0.196829104	-0.248515609	-0.172883951	0.926916363	-0.073794227	-0.431197266
902	VAS840	FALCON CABLE MEDIA	-0.342122313	0.162378009	-0.056678914	0.979328581	-0.081806426	0.276217623
901	VAV800	COX CABLE HAMPTON ROADS INC	-0.23641173	-0.075733158	-0.098535059	0.568666995	-0.045361587	-0.195799285
902	WAP400	PORT TOWNSEND CABLE TV LTD	-0.079302699	-1	-1	-1	-1	-1
901	WAS075	SEACOM CABLE TV LP	-0.495523824	-0.86376508	-0.574383927	-0.771798754	-0.444961497	-0.510372688
892	WIM250	INGERSOLL INDUSTRIES INC	-0.536202288	-0.548821508	-0.437261927	-0.210752364	-0.333891299	-0.034202278
892	WIM530	INGERSOLL INDUSTRIES INC	-0.691649459	-0.589319325	-0.609846144	-0.279263092	-0.517461439	-0.208800194
902	WIS160	CABLE TV FUND 14-A	-0.735471483	-0.578141951	-0.418121932	-0.244474734	-0.329348783	-0.134809549
891	WVC330	TELE-MEDIA CO	0.973994821	1.219670728	1.273676509	0.742657407	1.036604642	1.05826845
901	WVH650	CENTURY HUNTINGTON COMPANY	-0.332246189	0.53942893	0.229424626	-0.219644734	0.33678589	-0.99496864
901	WVK250	ARMSTRONG UTILITIES INC	-0.358464826	0.191411466	-0.0442817	0.435105363	-0.040532451	-0.67948396
882	WYC500	TCI CABLEVISION OF WYOMING IN	0.021733388	0.576679979	0.157832628	0	0.130702077	0.435054953
882	WYJ200	COOKE CABLEVISION INC	0.038319657	0.402370288	-0.051905691	0	-0.03650202	0.311668593
882	WYR400	TCI CABLEVISION OF WYOMING IN	-0.025818111	0.643777322	0.206595811	0	0.206555963	0.527244999

NAB 1990 Exhibit 45X

THIS FORM IS EFFECTIVE FOR ACCOUNTING PERIODS BEGINNING JANUARY 1, 1989.
(Note: This form may also be used for the filing periods January 1985 through December 1988.
If you need to file for an earlier period, contact the Licensing Division.)

STATEMENT OF ACCOUNT
for Secondary Transmissions by Cable Systems (Short Form)

General Instructions are at the end of this form [pages (i)-(vi)].

FOR COPYRIGHT OFFICE USE ONLY	
DATE RECEIVED	AMOUNT
LICENSING DIVISION AUG 31 1989 RECEIVED	REMITTANCE NUMBER 193443

SA1-2
(Short Form)
Return to:
LICENSING DIVISION
COPYRIGHT OFFICE
LIBRARY OF CONGRE
WASHINGTON, DC 20
(202) 707-8150

(A) Accounting Period

ACCOUNTING PERIOD COVERED BY THIS STATEMENT: (Check one of the boxes and fill in the year date.)
☒ January 1-June 30, 1989 (Year)
☐ July 1-December 31, ... (Year)

(B) Owner

INSTRUCTIONS:
Your file is established under the name on the peel off address label. **Please attach this label in the space indicated below.** If there are an changes, draw a line through the incorrect information and print or type the correct information beside the label.
IF A LABEL IS NOT ATTACHED, give the full legal name of the owner of the cable system in line 1. If the owner is a subsidiary of another corpora tion, give the full corporate title of the subsidiary, not that of the parent corporation.
In line 2, list any other name or names under which the owner conducts the business of the cable system.

LEGAL NAME OF OWNER OF CABLE SYSTEM: ☐ Check here if this is the system's first filing.

ATTACH LABEL HERE

1 05033 89/1
2 KING VIDEOCABLE COMPANY 2
(AREA: ARNOLD, CA)
P. O. BOX 24525
3 SEATTLE, WA 98124

(Number & Street, Rural Route, Apartment or Suite Number)

(City, Town, State, ZIP Code)

(C) System

INSTRUCTIONS: In line 1, give any business or trade names used to identify the business and operation of the system unless these names already appear in space B. In line 2, give the mailing address of the system, if different from the address given in space B.

IDENTIFICATION OF CABLE SYSTEM:
1 King Videocable Company

MAILING ADDRESS OF CABLE SYSTEM:
2 P.O. Box 490
(Number, Street, Rural Route, Apartment or Suite Number)
San Andreas, CA 95249
(City, Town, State, ZIP Code)

(D) Area Served

INSTRUCTIONS: List each separate community served by the cable system. A "community" is the same as a "community unit" as defined in FCC rule ". . . a separate and distinct community or municipal entity (including unincorporated communities within unincorporated areas and including single, di crete unincorporated areas.") 47 C.F.R. §76.5(mm). **The first community that you list will serve as a form of system identification hereafte known as the "First Community."** ***Please use it as the First Community on all future filings.***

COMMUNITY (CITY OR TOWN)	STATE	COMMUNITY (CITY OR TOWN)	STATE
First Community ▷ Arnold	CA		
Hathaway Pines	CA		
Avery	CA		

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).

King Videocable Company - Arnold

Name

(E) Secondary Transmission Service: Subscribers and Rates

SECONDARY TRANSMISSION SERVICE: SUBSCRIBERS AND RATES

In General: The information in space E should cover all categories of "secondary transmission service" of the cable system: that is, the retransmission of television and radio broadcasts by your system to subscribers. Give information about other services (including pay cable) in space F, not here. All the facts you state must be those existing on the last day of the accounting period (June 30 or December 31, as the case may be).

Number of Subscribers: Both blocks in space E call for the number of subscribers to the cable system, broken down by categories of secondary transmission service. In general, you can compute the number of "subscribers" in each category by counting the number of billings in that category (the number of persons or organizations charged separately for the particular service at the rate indicated—not the number of sets receiving service).

Rate: Give the standard rate charged for each category of service. Include both the amount of the charge and the unit in which it is generally billed. (Example: "$8 mth"). Summarize any standard rate variations within a particular rate category, but do not include discounts allowed for advance payment.

Block 1: In the left-hand block in space E, the form lists the categories of secondary transmission service that cable systems most commonly provide to their subscribers. Give the number of subscribers and rate for each listed category that applies to your system. **Note:** Where an individual or organization is receiving service that falls under different categories, that person or entity should be counted as a "subscriber" in each applicable category. Example: a residential subscriber who pays extra for cable service to additional sets would be included in the count under "Service to First Set," and would be counted once again under "Service to Additional Set(s)."

Block 2: If your cable system has rate categories for secondary transmission service that are different from those printed in block 1, (for example, tiers of services which include one or more secondary transmissions), list them, together with the number of subscribers and rates, in the right-hand block. A two or three word description of the service is sufficient.

BLOCK 1			BLOCK 2		
CATEGORY OF SERVICE	NO. OF SUBSCRIBERS	RATE	CATEGORY OF SERVICE	NO. OF SUBSCRIBERS	RATE
		/mo.			
Residential:					
○ Service to First Set	2907	14.25			
○ Service to Additional Set(s)	1188	3.10			
○ FM Radio (if separate rate)					
Motel, Hotel					
Commercial					
Converter					
○ Residential					
○ Non-Residential					

(F) Services Other Than Secondary Transmissions: Rates

SERVICES OTHER THAN SECONDARY TRANSMISSIONS: RATES

In General: Space F calls for rate (not subscriber) information with respect to all your cable system's services that were not covered in space E. That is, those services that are not offered in combination with any secondary transmission service for a single fee. There are two exceptions, you do not need to give rate information concerning: (1) services furnished at cost; and (2) services or facilities furnished to nonsubscribers. Rate information should include both the amount of the charge and the unit in which it is usually billed. If any rates are charged on a variable per-program basis, enter only the letters "PP" in the rate column.

Block 1: Give the standard rate charged by the cable system for each of the applicable services listed.

Block 2: List any services that your cable system furnished or offered during the accounting period that were not listed in block 1 and for which a separate charge was made or established. List these other services in the form of a brief (two or three word) description, and include the rate for each.

BLOCK 1				BLOCK 2	
CATEGORY OF SERVICE	RATE	CATEGORY OF SERVICE	RATE	CATEGORY OF SERVICE	RATE
Continuing Services:		**Installation: Non-Residential**			/mo.
○ Pay Cable	see block 2	○ Motel, Hotel		HBO/Disney	12.70
○ Pay Cable—Add'l Channel		○ Commercial			
○ Fire Protection		○ Pay Cable			
○ Burglar Protection		○ Pay Cable—Add'l Channel			
Installation: Residential		○ Fire Protection			
○ First Set	50.00	○ Burglar Protection			
○ Additional Set(s)	20.00	**Other Services:**			
○ FM Radio (if separate rate)		○ Reconnect	20.00		
○ Converter		○ Disconnect			

Name

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).
King Videocable Company-Arnold

193443

G

Primary Transmitters: Television

INSTRUCTIONS:

General: In space G, identify every television station (including translator stations and low power television stations) carried by your cable system d ing the accounting period, **except:** (1) stations carried only on a part-time basis under FCC rules and regulations in effect on June 24, 1981 permitting t carriage of certain network programs [sections 76.59(d)(2) and (4), 76.61(e)(2) and (4) or 76.63 (referring to 76.61(e)(2) and (4))]; and (2) certain static carried on a substitute program basis, as explained in the next paragraph.

Substitute Basis Stations: With respect to any distant stations carried by your cable system on a substitute program basis under specific FCC rul regulations, or authorizations:

- Do **not** list the station here in space G—but **do** list it in space I (the Special Statement Program Log)—if the station was carried **only** on a substitu basis.
- List the station here, and also in space I, if the station was carried both on a substitute basis and **also** on some other basis.

For futher information concerning substitute basis stations, see page (v) of the General Instructions.

Column 1: List each station's call sign.

Column 2: Give the number of the channel on which the station's broadcasts are carried in its own community. This may be different from the chan on which your cable system carried the station.

Column 3: Indicate in each case whether the station is a network station, an independent station, or a noncommercial educational station, by enter the letter "N" (for network), "I" (for independent) or "E" (for noncommercial educational). For the meaning of these terms, see page (iv) of the Gene Instructions.

Column 4: Give the location of each station. For U.S. stations, list the community to which the station is licensed by the FCC. For Mexican or Canad stations, if any, give the name of the community with which the station is identified.

1. CALL SIGN	2. B'CAST CHANNEL NUMBER	3. TYPE OF STATION	4. LOCATION OF STATION
KTVU	2	I	Oakland/San Francisco, CA
KCRA	3	N	Sacramento, CA
KVIE	6	E	Sacramento, CA
KXTV	10	N	Sacramento, CA
KOVR	13	N	Sacramento, CA
WTBS	17	I	Atlanta, GA
KCSO	19	I	Modesto, CA
KRBK	31	I	Sacramento, CA
KICU	36	I	San Jose, CA
KTXL	40	I	Sacramento, CA

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).

King Videocable Company - Arnold

Name

PRIMARY TRANSMITTERS: RADIO

Primary Transmitter Radio

In General: List every radio station carried on a separate and discrete basis and list those FM stations carried on an all-band basis whose signals were "generally receivable" by your cable system during the accounting period.

Special Instructions Concerning All-Band FM Carriage: Under Copyright Office Regulations, an FM signal is "generally receivable" if: (1) "it is carried by the system whenever it is received at the system's headend"; and (2) it can be **expected,** on the basis of monitoring, to be received at the headend, with the system's FM antenna, during certain stated intervals. For detailed information about the Copyright Office Regulations on this point, see page (iv) of the General Instructions.

Column 1: Identify the call sign of each station carried.

Column 2: State whether the station is AM or FM.

Column 3: If the radio station's signal was electronically processed by the cable system as a separate and discrete signal, indicate this by placing a check mark in the "S/D" column.

Column 4: Give the station's location (the community to which the station is licensed by the FCC or, in the case of Mexican or Canadian stations, if any, the community with which the station is identified).

CALL SIGN	AM or FM	S/D	LOCATION OF STATION	CALL SIGN	AM or FM	S/D	LOCATION OF STATION
KABL	FM		San Francisco, CA				
KBAY	FM		San Jose, CA				
KCTC	FM		Sacramento, CA				
KEWT	FM		Sacramento, CA				
KFBK	FM		Sacramento, CA				
KFRC	FM		San Francisco, CA				
KIOI	FM		San Francisco, CA				
KJAX	FM		Stockton, CA				
KNGT	FM		Jackson, CA				
KSAN	FM		San Francisco, CA				
KSFM	FM		Sacramento, CA				
KSTN	FM		Stockton, CA				
[illegible]OP	FM		Stockton, CA				
KWIN	FM		Lodi, CA				

193443

Name	LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1). King Videocable Company - Arnold

I

Substitute Carriage: Special Statement and Program Log

GENERAL:

In space I, identify **every nonnetwork television program**, broadcast by a **distant** station, that your cable system carried on a **substitute basis** during t accounting period, under specific present and former FCC rules, regulations, or authorizations. For a further explanation of the programming that must included in this log, see page (v) of the General Instructions.

1. SPECIAL STATEMENT CONCERNING SUBSTITUTE CARRIAGE:

- During the accounting period, did your cable system carry, on a substitute basis, any nonnetwork television program broadcast by a distant station? ☐ Yes ☒ No

Note: If your answer is "No", leave the rest of this page blank. If your answer is "Yes", you must complete the program log in block 2.

2. LOG OF SUBSTITUTE PROGRAMS:

In General: List each substitute program on a separate line. Use abbreviations wherever possible, if their meaning is clear. If you need more spa please attach additional pages.

Column 1: Give the title of every nonnetwork television program ("substitute program") that, during the accounting period, was broadcast by a dist station and that your cable system substituted for the programming of another station under certain FCC rules, regulations, or authorizations. See page (v the General Instructions for further information. Do not use general categories like "movies" or "basketball." List specific program titles, for example, "I L Lucy" or "NBA Basketball: 76ers vs. Bulls".

Column 2: If the program was broadcast live, enter "Yes". Otherwise enter "No".

Column 3: Give the call sign of the station broadcasting the substitute program.

Column 4: Give the broadcast station's location (the community to which the station is licensed by the FCC or, in the case of Mexican or Canad stations, if any, the community with which the station is identified).

Column 5: Give the month and day when your system carried the substitute program. Use numerals, with the month first. Example: for May 7 g "5/7".

Column 6: State the times when the substitute program was carried by your cable system. List the times accurately to the nearest five minutes. Exam a program carried by a system from 6:01:15 p.m. to 6:28:30 p.m. should be stated as "6:00-6:30 p.m."

Column 7: Enter the letter "R" if the listed program was substituted for programming that your system was *required* to delete under FCC rules regulations in effect during the accounting period; or enter the letter "P" if the listed program was substituted for programming that your system was permi to delete under FCC rules and regulations in effect on October 19, 1976.

SUBSTITUTE PROGRAM				WHEN SUBSTITUTE CARRIAGE OCCURRED			7. REASON FOR DELETIO
1. TITLE OF PROGRAM	2. LIVE? Yes or No	3. STATION'S CALL SIGN	4. STATION'S LOCATION	5. MONTH AND DAY	6. TIMES FROM	TO	

FORM SA1–2. PAGE 6.

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).

King Videocable Company - Arnold

Name

GROSS RECEIPTS

INSTRUCTIONS: The figure you give in this space determines the form you file and the amount you pay. Enter the total of all of the amounts ("gross receipts") paid to your cable system by subscribers for the system's "secondary transmission service" (as identified in space E) during the accounting period. For a further explanation of how to compute this amount, see page (v) of the General Instructions.

K

Gross Receipts

- Gross receipts from subscribers for secondary transmission service(s) during the accounting period ..... $249,853.94 (Amount of "gross receipts")

NOTE: If the figure you give in this space is $292.000. or more you should not use this form, SA1-2. (See page (i) of the General Instructions.)

L

Copyright Royalty Fee

INSTRUCTIONS FOR COMPUTING ROYALTY FEE

To compute the royalty fee you owe:

- Complete **either** block 1, block 2 **or** block 3
- Use block 1 if the amount of "gross receipts" in space K is $75,800 or less
- Use block 2 if the amount of "gross receipts" in space K is more than $75,800 but less than $146,000
- Use block 3 if the amount of "gross receipts" in space K is more than $146,000 but less than $292,000

See page (vi) of the General Instructions for more information.

BLOCK 1: "GROSS RECEIPTS" OF $75,800 OR LESS

INSTRUCTIONS: As a cable system with "gross receipts" of $75,800 or less, the royalty fee that you must pay for this six-month accounting period is $28.

- **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD** $28.00

BLOCK 2: "GROSS RECEIPTS" OF $146,000 OR LESS (but more than $75,800)

1. Base amount under statutory formula ..... ▷ $146,000
2. Enter amount of "gross receipts" from space K ..... ▷
3. Subtract line 2 from line 1 ..... ▷
4. Enter the amount of "gross receipts" from space K ..... ▷
5. Enter the amount from line 3 ..... ▷
6. Subtract line 5 from line 4 ..... ▷
7. Multiply line 6 by .005 (Enter figure here and in line 8) ..... ▷
8. **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD** ..... ▷ $

BLOCK 3: "GROSS RECEIPTS" OF MORE THAN $146,000 (but less than $292,000)

1. Enter amount of "gross receipts" from space K ..... ▷ $249,853.94
2. Base amount under statutory formula ..... ▷ $146,000
3. Subtract line 2 from line 1 ..... ▷ 103,853.94
4. Multiply line 3 by .01 ..... ▷ 1,038.54
5. Royalty due on the first $146,000 of gross receipts (under statutory formula) ..... ▷ $730
6. Add lines 4 and 5 (Enter figure here and in line 7) ..... ▷ 1,768.54
7. **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD** ..... ▷ $1,768.54

Name

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1). 193143

King Videocable Company - Arnold

Channels

CHANNELS

INSTRUCTIONS: You must give: (1) the number of channels on which the cable system carried television broadcast stations to its subscribers; a (2) the cable system's total number of activated channels, during the accounting period.

1. Enter the total number of channels on which the cable system carried television broadcast stations 10

2. Enter the total number of activated channels on which the cable system carried television broadcast stations and nonbroadcast services 14

Contact

INDIVIDUAL TO BE CONTACTED IF FURTHER INFORMATION IS NEEDED: (Identify an individual to whom we can w or call about this Statement of Account.)

Name Christine W. Hughes Telephone (206) 448-3670 (Area Code)

Address P.O. Box 24525 (Number, Street, Rural Route, Apartment or Suite Number)

Seattle, WA 98124 (City, Town, State, ZIP Code)

Certification

CERTIFICATION: (This Statement of Account must be certified and signed in accordance with Copyright Office Regulations, as explained in General Instructions.)

o I, the undersigned, hereby certify that: (Check one, **but only one**, of the boxes)

☐ **(Owner other than corporation or partnership)** I am the owner of the cable system as identified in line 1 of space B: or

☐ **(Agent of owner other than corporation or partnership)** I am the duly authorized agent of the owner of the cable system as identifi line 1 of space B, and that owner is not a corporation or partnership: or

☒ **(Officer or partner)** I am an officer (if a corporation) or a partner (if a partnership) of the legal entity identified as owner of the cable syste line 1 of space B.

o I have examined this Statement of Account and hereby declare under penalty of law that all statements of fact contained herein are true, comp and correct to the best of my knowledge, information, and belief, and are made in good faith. [18 U.S.C., Section 1001(1986)]

Handwritten signature: (X) Christine W. Hughes

Typed or printed name: Christine W. Hughes

Title: Vice President-Finance (Title of official position held in corporation or partnership)

Date: August 31, 1989

THIS FORM IS EFFECTIVE FOR ACCOUNTING PERIODS BEGINNING JANUARY 1, 1989.
(Note: This form may also be used for the filing periods January 1985 through December 1988.
If you need to file for an earlier period, contact the Licensing Division.)

USE THIS FORM WHEN:

- You are the owner (or represent the owner) of a cable system; and
- You are filing the semiannual Statement of Account required by the copyright law; and
- Your system's semiannual "gross receipts for secondary transmissions" (the figure you give in space K of the form) is **less than $292,000**; and
- You are also depositing the required semiannual royalty fee with the Licensing Division of the Copyright Office.

IF YOUR FIGURE FOR SEMIANNUAL "GROSS RECEIPTS" IN SPACE K IS $292,000 OR MORE, USE SA3 (LONG FORM)

GENERAL INSTRUCTIONS FOR SA1-2 (SHORT FORM)

Cable Systems and the Copyright Law (P.L. 94-553)

Cable systems are subject to copyright liability for their use of copyrighted material in "secondary transmissions" (the retransmission of television and radio broadcasts to subscribers). Cable retransmissions of copyrighted programming are subject to a system of "compulsory licensing." Among other things this means that twice a year the owner of a cable system must send a Statement of Account, together with a royalty fee, to the Licensing Division of the Copyright Office.

"Primary Transmissions" and "Secondary Transmissions"

In providing copyright liability for cable systems, the law draws a distinction between "primary transmissions" and "secondary transmissions":

- **"Primary Transmissions":** These include broadcasts by radio and television stations to the public that are retransmitted by cable systems to their subscribers.
- **"Secondary Transmissions":** This is the basic service of retransmitting television and radio broadcasts to subscribers. The statute requires all U.S. cable systems, regardless of how many subscribers they have or whether they are carrying any distant signals, to pay some copyright royalties. However, instead of obliging cable systems to bargain individually for each copyrighted program they retransmit, the law offers them the opportunity of obtaining a "compulsory license" for secondary transmissions.

Note: "Secondary transmissions" do not include transmissions originated by a cable system (including local origination cablecasting, pay cable, program services, background music services, and originations on leased or access channels). Cable systems must negotiate for the use of any copyrighted material

How to File the Statement of Account and Royalty Fee

First: Study the general information on these pages and read through the detailed instructions in the Statement of Account form itself. Before you start completing the form, make sure that you have collected all of the necessary information and that you are using the right form.

Second: Fill out the Statement of Account form, giving all of the required information about your cable system and about the television and radio stations carried by it. Use a typewriter, or print the information in dark ink.

Third: Certify the Statement of Account by signing at space O. The Statement of Account is not acceptable unless it bears the handwritten signature of one of the persons indicated in space O as authorized to certify it under Copyright Office Regulations.

Fourth: Obtain a **certified check, cashier's check,** or **money order,** in the amount you have calculated in space L, to cover the copyright royalty fee. Payment in any other form (such as personal or company checks) **will be returned.** The remittance should be payable to: *Register of Copyrights.* Do not send cash.

Fifth: Send the completed Statement of Account, together with the copyright royalty fee, to: Licensing Division, Copyright Office, Library of Congress, Washington, D.C. 20557.

Sixth: The Copyright Office will retain your Statement of Account and make it a part of our public records. You should therefore keep a copy of the entire Statement, as filed, in case you need it for future

NAB 1990 Exhibit 46X

THIS FORM IS EFFECTIVE FOR ACCOUNTING PERIODS BEGINNING JANUARY 1, 1989.
If you are filing for a prior accounting period, contact the Licensing Division for the correct form.

STATEMENT OF ACCOUNT
for Secondary Transmissions by Cable Systems (Short Form)

General Instructions are at the end of this form [pages (i)-(vi)].

FOR COPYRIGHT OFFICE USE ONLY	
DATE RECEIVED	AMOUNT
LICENSING DIVISION FEB 2 8 1990 RECEIVED	$2,156.66 (AD)
	REMITTANCE NUMBER
	207010

SA1-2
(Short Form)
Return to:
LICENSING DIVISIC
COPYRIGHT OFFIC
LIBRARY OF CONG
WASHINGTON, DC :
(202) 707-8150

(A) Accounting Period

ACCOUNTING PERIOD COVERED BY THIS STATEMENT: (Check one of the boxes and fill in the year date.)

☐ January 1-June 30, ... (Year)

☒ July 1-December 31, 1989 (Year)

(B) Owner

INSTRUCTIONS:
Your file is established under the name on the peel off address label. **Please attach this label in the space indicated below.** If there are a changes, draw a line through the incorrect information and print or type the correct information beside the label.
IF A LABEL IS NOT ATTACHED, give the full legal name of the owner of the cable system in line 1. If the owner is a subsidiary of another corpo tion, give the full corporate title of the subsidiary, not that of the parent corporation.
In line 2, list any other name or names under which the owner conducts the business of the cable system.

ATTACH LABEL HERE

1 ⇨ **LEGAL NAME OF OWNER OF CABLE SYSTEM:** ☐ Check here if this is the system's first filing.

05033 89/2

2 BUSINES KING VIDEOCABLE COMPANY 2
(AREA: ARNOLD, CA)
P. O. BOX 24525

MAILING SEATTLE, WA 98124

3 ⇨

(City, Town, State, ZIP Code)

(C) System

INSTRUCTIONS: In line 1, give any business or trade names used to identify the business and operation of the system unless these names already appear in space B. In line 2, give the mailing address of the system, if different from the address given in space B.

1 **IDENTIFICATION OF CABLE SYSTEM:**
King Videocable Company

2 **MAILING ADDRESS OF CABLE SYSTEM:**
P.O. Box 490
San Andreas, CA 95249
(Number, Street, Rural Route, Apartment or Suite Number)

(City, Town, State, ZIP Code)

(D) Area Served

INSTRUCTIONS: List each separate community served by the cable system. A "community" is the same as a "community unit" as defined in FCC rules: "... a separate and distinct community or municipal entity (including unincorporated communities within unincorporated areas and including single, discrete unincorporated areas.") 47 C.F.R. §76.5(mm). **The first community that you list will serve as a form of system identification hereafter known as the "First Community."** ***Please use it as the First Community on all future filings.***

First Community ► COMMUNITY (CITY OR TOWN)	STATE	COMMUNITY (CITY OR TOWN)	STATE
Arnold	CA		
Hathaway Pines	CA		
Avery	CA		

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).
King Videocable Company - Arnold

Name

SECONDARY TRANSMISSION SERVICE: SUBSCRIBERS AND RATES

(E) Secondary Transmission Service: Subscribers and Rates

In General: The information in space E should cover all categories of "secondary transmission service" of the cable system: that is, the retransmission of television and radio broadcasts by your system to subscribers. Give information about other services (including pay cable) in space F, not here. All the facts you state must be those existing on the last day of the accounting period (June 30 or December 31, as the case may be).

Number of Subscribers: Both blocks in space E call for the number of subscribers to the cable system, broken down by categories of secondary transmission service. In general, you can compute the number of "subscribers" in each category by counting the number of billings in that category (the number of persons or organizations charged separately for the particular service at the rate indicated—not the number of sets receiving service).

Rate: Give the standard rate charged for each category of service. Include both the amount of the charge and the unit in which it is generally billed. (Example: "$8/mth"). Summarize any standard rate variations within a particular rate category, but do not include discounts allowed for advance payment.

Block 1: In the left-hand block in space E, the form lists the categories of secondary transmission service that cable systems most commonly provide to their subscribers. Give the number of subscribers and rate for each listed category that applies to your system. **Note:** Where an individual or organization is receiving service that falls under different categories, that person or entity should be counted as a "subscriber" in each applicable category. Example: a residential subscriber who pays extra for cable service to additional sets would be included in the count under "Service to First Set," and would be counted once again under "Service to Additional Set(s)."

Block 2: If your cable system has rate categories for secondary transmission service that are different from those printed in block 1, (for example, tiers of services which include one or more secondary transmissions), list them, together with the number of subscribers and rates, in the right-hand block. A two or three word description of the service is sufficient.

BLOCK 1			BLOCK 2		
CATEGORY OF SERVICE	NO. OF SUBSCRIBERS	RATE	CATEGORY OF SERVICE	NO. OF SUBSCRIBERS	RATE
Residential:		/mo.			
○ Service to First Set	2983	14.95			
○ Service to Additional Set(s)	1204	3.25			
○ FM Radio (if separate rate)					
Motel, Hotel					
Commercial					
Converter					
○ Residential					
○ Non-Residential					

SERVICES OTHER THAN SECONDARY TRANSMISSIONS: RATES

(F) Services Other Than Secondary Transmissions: Rates

In General: Space F calls for rate (not subscriber) information with respect to all your cable system's services that were not covered in space E. That is, those services that are not offered in combination with any secondary transmission service for a single fee. There are two exceptions, you do not need to give rate information concerning: (1) services furnished at cost; and (2) services or facilities furnished to nonsubscribers. Rate information should include both the amount of the charge and the unit in which it is usually billed. If any rates are charged on a variable per-program basis, enter only the letters "PP" in the rate column.

Block 1: Give the standard rate charged by the cable system for each of the applicable services listed.

Block 2: List any services that your cable system furnished or offered during the accounting period that were not listed in block 1 and for which a separate charge was made or established. List these other services in the form of a brief (two or three word) description, and include the rate for each.

BLOCK 1				BLOCK 2	
CATEGORY OF SERVICE	RATE	CATEGORY OF SERVICE	RATE	CATEGORY OF SERVICE	RATE
Continuing Services:		**Installation: Non-Residential**			/mo.
○ Pay Cable see block 2		○ Motel, Hotel		HBO/Disney	12.00
○ Pay Cable—Add'l Channel		○ Commercial			
○ Fire Protection		○ Pay Cable			
○ Burglar Protection		○ Pay Cable—Add'l Channel			
Installation: Residential		○ Fire Protection			
○ First Set	55.00	○ Burglar Protection			
○ Additional Set(s)	15.00	**Other Services:**			
○ FM Radio (if separate rate)		○ Reconnect	35.00		
○ Converter		○ Disconnect			
		○ Outlet Relocation	15.00		
		○ Move to New Address			

Name	LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).
	King Videocable Company-Arnold 207010

Primary Transmitters: Television

INSTRUCTIONS:

General: In space G, identify every television station (including translator stations and low power television stations) carried by your cable system ing the accounting period, **except:** (1) stations carried only on a part-time basis under FCC rules and regulations in effect on June 24, 1981 permittir carriage of certain network programs [sections 76.59(d)(2) and (4), 76.61(e)(2) and (4) or 76.63 (referring to 76.61(e)(2) and (4))]; and (2) certain sta carried on a substitute program basis, as explained in the next paragraph.

Substitute Basis Stations: With respect to any distant stations carried by your cable system on a substitute program basis under specific FCC regulations, or authorizations:

- Do **not** list the station here in space G—~~but~~ list it in space I (~~the~~ Special Statement Program Log)—if the station was carried **only** on a subs basis.
- List the station here, and also in space I, if the ~~station~~ was carried ~~both~~ on a substitute basis and **also** on some other basis.

For futher information concerning substitute basis stations, see page (v) of the General Instructions.

Column 1: List each station's call sign.

Column 2: Give the number of the channel on which the station's broadcasts are carried in its own community. This may be different from the cha on which your cable system carried the station.

Column 3: Indicate in each case whether the station is a network station, an independent station, or a noncommercial educational station, by ente the letter "N" (for network), "I" (for independent) or "E" (for noncommercial educational). For the meaning of these terms, see page (iv) of the Ger Instructions.

Column 4: Give the location of each station. For U.S. stations, list the community to which the station is licensed by the FCC. For Mexican or Canac stations, if any, give the name of the community with which the station is identified.

1. CALL SIGN	2. B'CAST CHANNEL NUMBER	3. TYPE OF STATION	4. LOCATION OF STATION
KCRA	3	N	Sacramento, CA
KVIE	6	E	Sacramento, CA
KXTV	10	N	Sacramento, CA
KOVR	13	N	Sacramento, CA
WTBS	17	I	Atlanta, GA
KCSO	19	I	Modesto, CA
KRBK	31	I	Sacramento, CA
KTXL	40	I	Sacramento, CA
KSCH	58	I	Sacramento, CA

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).
King Videocable Company-Arnold

Name

PRIMARY TRANSMITTERS: RADIO

Primary Transmitters: Radio

In General: List every radio station carried on a separate and discrete basis and list those FM stations carried on an all-band basis whose signals were "generally receivable" by your cable system during the accounting period.

Special Instructions Concerning All-Band FM Carriage: Under Copyright Office Regulations, an FM signal is "generally receivable" if: (1) "it is carried by the system whenever it is received at the system's headend"; and (2) it can be **expected,** on the basis of monitoring, to be received at the headend, with the system's FM antenna, during certain stated intervals. For detailed information about the Copyright Office Regulations on this point, see page (iv) of the General Instructions.

Column 1: Identify the call sign of each station carried.

Column 2: State whether the station is AM or FM.

Column 3: If the radio station's signal was electronically processed by the cable system as a separate and discrete signal, indicate this by placing a check mark in the "S D" column.

Column 4: Give the station's location (the community to which the station is licensed by the FCC or, in the case of Mexican or Canadian stations, if any, the community with which the station is identified).

CALL SIGN	AM or FM	S/D	LOCATION OF STATION	CALL SIGN	AM or FM	S/D	LOCATION OF STATION
KABL	FM		San Francisco, CA				
KBAY	FM		San Jose, CA				
KCTC	FM		Sacramento, CA				
KEWT	FM		Sacramento, CA				
KFBK	FM		Sacramento, CA				
KFRC	FM		San Francisco, CA				
KIOI	FM		San Francisco, CA				
KJAX	FM		Stockton, CA				
KNGT	FM		Jackson, CA				
KSAN	FM		San Francisco, CA				
KSFM	FM		Sacramento, CA				
KSTN	FM		Stockton, CA				
KUOP	FM		Stockton, CA				
KWIN	FM		Lodi, CA				

Name	LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1). King Videocable Company-Arnold 207010	FORM SA1-2. P/

I

Substitute Carriage: Special Statement and Program Log

GENERAL:

In space I, identify **every nonnetwork television program,** broadcast by a **distant** station, that your cable system carried on a **substitute basis** duri accounting period, under specific present and former FCC rules, regulations, or authorizations. For a further explanation of the programming that m: included in this log, see page (v) of the General Instructions.

1. SPECIAL STATEMENT CONCERNING SUBSTITUTE CARRIAGE:

- During the accounting period, did your cable system carry, on a substitute basis, any nonnetwork television program broadcast by a distant station?

☐ Yes ☒ No

Note: If your answer is "No", leave the rest of this page blank. If your answer is "Yes", you must complete the program log in block 2.

2. LOG OF SUBSTITUTE PROGRAMS:

In General: List each substitute program on a separate line. Use abbreviations wherever possible, if their meaning is clear. If you need more s please attach additional pages.

Column 1: Give the title of every nonnetwork television program ("substitute program") that, during the accounting period, was broadcast by a di station and that your cable system substituted for the programming of another station under certain FCC rules, regulations, or authorizations. See page the General Instructions for further information. Do not use general categories like "movies" or "basketball." List specific program titles, for example, "I Lucy" or "NBA Basketball: 76ers vs. Bulls".

Column 2: If the program was broadcast live, enter "Yes". Otherwise enter "No".

Column 3: Give the call sign of the station broadcasting the substitute program.

Column 4: Give the broadcast station's location (the community to which the station is licensed by the FCC or, in the case of Mexican or Cana stations, if any, the community with which the station is identified).

Column 5: Give the month and day when your system carried the substitute program. Use numerals, with the month first. Example: for May 7 "5/7".

Column 6: State the times when the substitute program was carried by your cable system. List the times accurately to the nearest five minutes. Exam a program carried by a system from 6:01:15 p.m. to 6:28:30 p.m. should be stated as "6:00-6:30 p.m."

Column 7: Enter the letter "R" if the listed program was substituted for programming that your system was *required* to delete under FCC rules regulations in effect during the accounting period; or enter the letter "P" if the listed program was substituted for programming that your system was permi to delete under FCC rules and regulations in effect on October 19, 1976.

SUBSTITUTE PROGRAM				WHEN SUBSTITUTE CARRIAGE OCCURRED			7. REASON FOR DELETIO
1. TITLE OF PROGRAM	2. LIVE? Yes or No	3. STATION'S CALL SIGN	4. STATION'S LOCATION	5. MONTH AND DAY	6. TIMES FROM	TO	

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).

King Videocable Company-Arnold

Name

GROSS RECEIPTS

INSTRUCTIONS: The figure you give in this space determines the form you file and the amount you pay. Enter the total of all of the amounts ("gross receipts") paid to your cable system by subscribers for the system's "secondary transmission service" (as identified in space E) during the accounting period. For a further explanation of how to compute this amount, see page (v) of the General Instructions.

(K) **Gross Receipts**

- Gross receipts from subscribers for secondary transmission service(s) during the accounting period ..... $ 288,666.25 (Amount of "gross receipts")

IMPORTANT: You must complete a statement in space P concerning gross receipts.

INSTRUCTIONS FOR COMPUTING ROYALTY FEE

(L) **Copyright Royalty Fee**

To compute the royalty fee you owe:

- Complete **either** block 1, block 2 **or** block 3
- Use block 1 if the amount of "gross receipts" in space K is $75,800 or less
- Use block 2 if the amount of "gross receipts" in space K is more than $75,800 but less than $146,000
- Use block 3 if the amount of "gross receipts" in space K is more than $146,000 but less than $292,000

See page (vi) of the General Instructions for more information.

BLOCK 1: "GROSS RECEIPTS" OF $75,800 OR LESS

INSTRUCTIONS: As a cable system with "gross receipts" of $75,800 or less, the royalty fee that you must pay for this six-month accounting period is $28.

Line 1. Royalty Fee for Accounting Period ..... $ 28.00

Line 2. Interest Charge. Enter the amount from line 4, space Q, page 8 ..... $

Line 3. **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD.** Add lines 1 and 2. ..... $

BLOCK 2: "GROSS RECEIPTS" OF $146,000 OR LESS (but more than $75,800)

1. Base amount under statutory formula ..... ▷ $146,000
2. Enter amount of "gross receipts" from space K ..... ▷
3. Subtract line 2 from line 1 ..... ▷
4. Enter the amount of "gross receipts" from space K ..... ▷
5. Enter the amount from line 3 ..... ▷
6. Subtract line 5 from line 4 ..... ▷
7. Multiply line 6 by .005 (enter figure here) ..... ▷ $
8. Interest Charge. Enter the amount from line 4, space Q, page 8 ..... ▷ $
9. **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD.** Add lines 7 and 8 ..... ▷ $

BLOCK 3: "GROSS RECEIPTS" OF MORE THAN $146,000 (but less than $292,000)

1. Enter amount of "gross receipts" from space K ..... ▷ $288,666.25
2. Base amount under statutory formula ..... ▷ $146,000
3. Subtract line 2 from line 1 ..... ▷ 142,666.25
4. Multiply line 3 by .01 ..... ▷ 1,426.66
5. Royalty due on the first $146,000 of gross receipts under statutory formula) ..... ▷ $730
6. Interest Charge. Enter the amount from line 4, space Q, page 8 ..... ▷ $ -0-
7. **TOTAL ROYALTY FEE PAYABLE FOR ACCOUNTING PERIOD.** Add lines 4, 5, and 6 ..... ▷ $ 2,156.66

IMPORTANT: When you file your Statement of Account on this form, SA1-2, you must also enclose with it the royalty fee you have computed in block 1, block 2 or block 3, above. Your remittance must be in the form of a **certified check, cashier's check,** or **money order,** payable to: *Register of Copyrights* Other forms of remittance, including personal or company checks, will be returned. Do not send cash.

Name

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).

King Videocable Company-Arnold 207010

(M) **Channels**

CHANNELS

INSTRUCTIONS: You must give: (1) the number of channels on which the cable system carried television broadcast stations to its subscribers; a (2) the cable system's total number of activated channels, during the accounting period.

1. Enter the total number of channels on which the cable system carried television broadcast stations 9

2. Enter the total number of activated channels on which the cable system carried television broadcast stations and nonbroadcast services 13

(N) **Contact**

INDIVIDUAL TO BE CONTACTED IF FURTHER INFORMATION IS NEEDED: (Identify an individual to whom we can wr or call about this Statement of Account.)

Name Benjamin M. Woo Telephone (206)448-3605
(Area Code)

Address P.O. Box 24525
(Number, Street, Rural Route, Apartment or Suite Number)

Seattle, WA 98124
(City, Town, State, ZIP Code)

(O) **Certification**

CERTIFICATION: (This Statement of Account must be certified and signed in accordance with Copyright Office Regulations, as explained in the General Instructions.)

o I, the undersigned, hereby certify that. (Check one, **but only one,** of the boxes)

☐ **(Owner other than corporation or partnership)** I am the owner of the cable system as identified in line 1 of space B; or

☐ **(Agent of owner other than corporation or partnership)** I am the duly authorized agent of the owner of the cable system as identified in line 1 of space B, and that owner is not a corporation or partnership; or

☒ **(Officer or partner)** I am an officer (if a corporation) or a partner (if a partnership) of the legal entity identified as owner of the cable system in line 1 of space B

o I have examined this Statement of Account and hereby declare under penalty of law that all statements of fact contained herein are true, complete, and correct to the best of my knowledge, information, and belief, and are made in good faith. [18 U.S.C., Section 1001(1986)]

Handwritten signature: (X) Christine W. Hughes

Typed or printed name: Christine W. Hughes

Title: Vice President-Finance
(Title of official position held in corporation or partnership)

Date: February 23, 1990

LEGAL NAME OF OWNER OF CABLE SYSTEM: Give the name exactly as it appears in space B, line 1 (page 1).
King Videocable Company-Arnold

Name

SPECIAL STATEMENT CONCERNING GROSS RECEIPTS EXCLUSION

Statement of Gross Receipts

The Satellite Home Viewer Act of 1988 amended Title 17, section 111(d)(1)(A), of the Copyright Act by adding the following sentence:

"In determining the total number of subscribers and the gross amounts paid to the cable system for the basic service of providing secondary transmissions of primary broadcast transmitters, the system shall not include subscribers and amounts collected from subscribers receiving secondary transmissions for private home viewing pursuant to section 119."

For more information on when to exclude these amounts, see page (v) of the General Instructions.

During the accounting period did the cable system exclude any amounts of gross receipts for secondary transmissions made by satellite carriers to satellite home "dish" owners?

☐ NO

☐ YES. Enter the total here ..... $_____
and list the satellite carrier(s) below.

Name _____ Name _____

Mailing Address _____ Mailing Address _____

_____ _____

_____ _____

_____

Name _____ Name _____

Mailing Address _____ Mailing Address _____

_____ _____

_____ _____

WORKSHEET FOR COMPUTING INTEREST

Interest Assessment

You must complete this worksheet for those royalty payments submitted as a result of a late payment or underpayment. For an explanation of interest assessment, see page (vi) General Instructions.

Line 1. Enter the amount of late payment or underpayment ..... $_____

x _____ %

Line 2. Multiply line 1 by the interest rate* and enter the sum here ..... _____

x _____ days

Line 3. Multiply line 2 by the number of days late ..... _____

x .00274

Line 4. Multiply line 3 by .00274** enter here and in space L (page 6) Block 1, line 2, or Block 2, line 8, or Block 3, line 6..... $_____
(interest charge)

*Contact the Licensing Division at 202-707-8150 for the interest rate for the accounting period in which the late payment or underpayment occurred.

**This is the decimal equivalent of 1/365, which is the interest assessment for one day late.

NOTE: If you are filing this worksheet covering a Statement of Account already submitted to the Copyright Office, please list below the owner, Address, First Community Served, and Accounting Period as given in the original filing.

Owner _____

Address _____

_____

First Community Served _____

Accounting Period _____

CABLE COPYRIGHT DISTRIBUTION
PROGRAMMING BY STATION

MOTION PICTURE ASSOCIATION OF AMERICA
CABLE DATA CORPORATION / 1989 DISTRIBUTION

CALL SIGN | -------CITY--------- | ST | MARKET: 101, NEW YORK
WPIX | 11 | NEW YORK | NY

	TOTALS ALL TYPES	TYPE: 1 LOCAL	2 SYN-SERIES	3 DEV-SERIES	4 MOVIES	MAJOR 5 SPORTS	6 OTHER	??? 9
TOTAL QUARTER HOURS	13,433	457	9,688	276	2,800	225	13	0
% TOTAL QHRS	100.000	3.252	72.089	2.054	20.835	1.674	.097	
TOTAL HOUSEHOLD HOURS	107,978,034	972,508	64,542,254	294,769	36,093,727	5,726,419	248,356	0
% TOTAL HHRS	100.000	.901	59.829	.273	33.458	5.308	.230	
QHRS AS % OF ALL QHRS	1.573	0.044	0.489	0.028	0.286	0.022	0.001	0.000
HH HOURS AS % OF ALL HH HOURS	2.912	0.026	1.742	0.007	0.974	0.154	0.006	0.000

MAJOR SPORTS	BASEBALL	BASKETBALL	FOOTBALL	HOCKEY	SOCCER	COL. BSKT	COL. FOOT	OTHER 0
TOTAL QUARTER HOURS	112	0	0	0	0	0	13	
% MAJOR SPORTS QHRS	94.958						5.778	
TOTAL HOUSEHOLD HOURS	5,[illegible]		0	0	0	0	58,451	0
% MAJOR SPORTS HHRS	98.979						1.021	